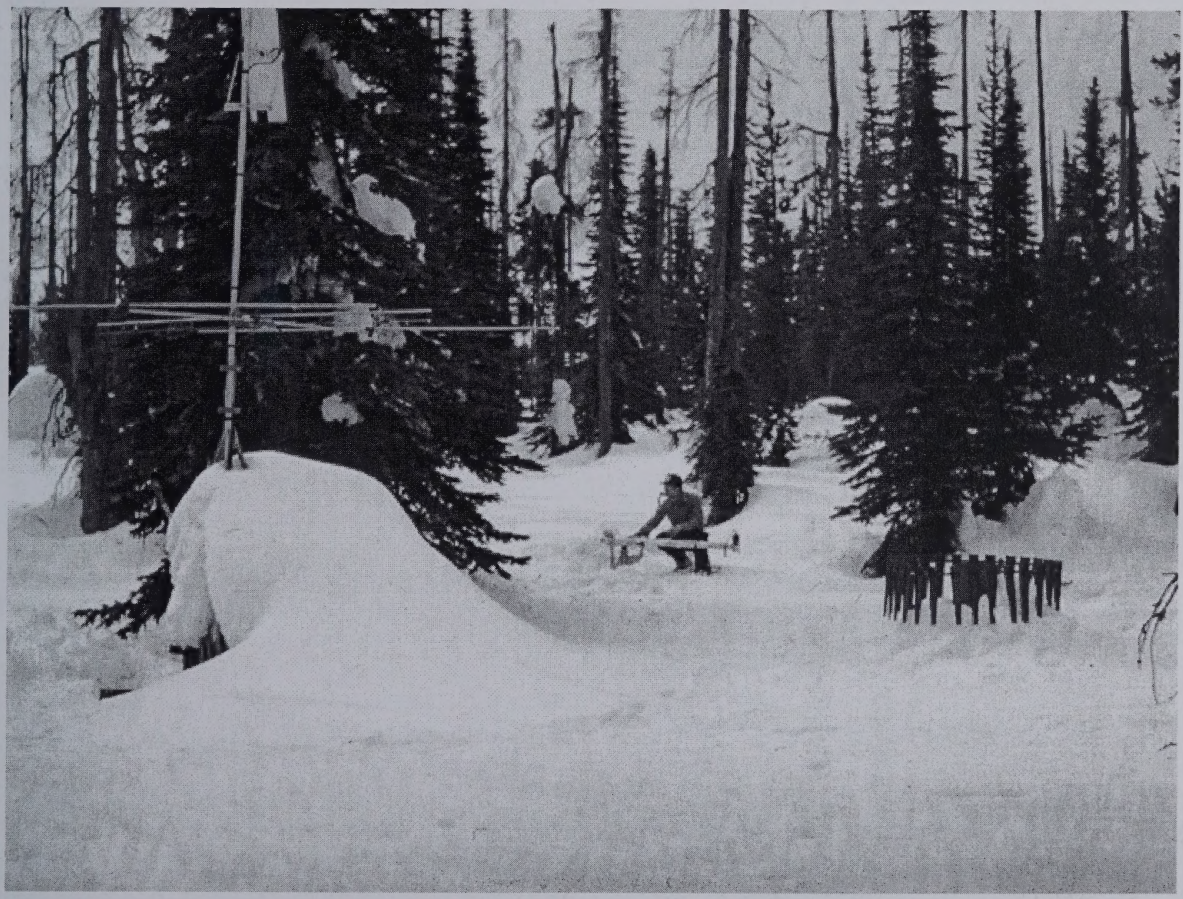
USDA United States Department of Agriculture

Natural Resources Conservation Service

Montana Water Supply Outlook Report January 1, 2003



Water Supply Outlook Report
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:
See Attached List

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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Water Supply Outlook Report

and

Federal - State - Private

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United States Department of Agriculture
Natural Resources Conservation Service
Bozeman, Montana

(406) 587-6811
10 E Babcock
Federal Bldg Room 443
Bozeman MT 59715

Where to Get More Information

This contact list provides you with the names and phone numbers of individuals who can provide more detailed snow survey information for each county.

Beaverhead County
Victor Hager
683-3800

Big Horn County
Evan Van Order
665-3442

Blaine County
Matthew Crampton
357-2320

Broadwater County
Kelly Morris
266-3146

Carbon County
Gregory Evertz
962-3641

Carter County
Wayne Yost
775-6355

Cascade County
Marty Metz
727-7580

Chouteau County
Dan Van Voast
622-5627

Custer County
Terry Heck
232-7905

Daniels County
Stanley French
487-5366

Dawson County
Linda Peterson-Lohse
365-5566

Deer Lodge County
Glen Green
846-1703

Fallon County
Ann Fischer
778-2217

Fergus County
Patty Creamer
538-7401

Flathead County
Angel Rosario
752-4242

Gallatin County
Gordon Hill
522-4018

Garfield County
Clarence Clayton
557-2740

Glacier County
Mark Johnson
873-4292

Golden Valley County
John Rouane Jr.
323-2103

Granite County
Annette Deyling
859-3291

Hill County
Deana Grabofsky
265-6792

Jefferson County
Julie Sacks
287-3215

Judith Basin County
Rick Caquelin
566-2311

Lake County
David Wolf
676-2841

Lewis and Clark County
Lex Riggle
449-5278

Liberty County
Dawn Wickum
759-5778

Lincoln County
Kirk Sullivan
296-2233

Madison County
Ole Berkram
842-5741

McCone County
Regan Fanning
485-2744

Meagher County
Tammy DeCock
547-3633

(over)

Mineral County
Mike Odegard
829-3395

Missoula County
Mike Odegard
829-3395

Musselshell County
John Rouane Jr.
323-2103

Park County
Ron Hoagland
222-2899

Petroleum County
Nikki Lott
429-6646

Phillips County
Lorna Philp
654-1334

Pondera County
Anthony Prince
278-3922

Powder River County
Carol Hilliard
436-2417

Powell County
Glen Green
846-1703

Prairie County
Bob Prongua
635-5381

Ravalli County
Lane Johnson
363-5010

Richland County
Jamie Selting
433-2103

Roosevelt County
Robert Bray
787-5232

Rosebud County
Rocky Schwagler
356-7333

Sanders County
Don Feist
826-3701

Sheridan County
Monica Friedrich
765-1801

Silver Bow County
Julie Sacks
287-3215

Stillwater County
Philip Sandoval
322-5359

Sweet Grass County
Chuck Roloff
932-5160

Teton County
Stacy Denny-Eneboe
466-5722

Toole County
Misty Vermulm
434-5234

Treasure County
Stewart Greer
342-5510

Valley County
Denise Wiedenheft
228-4321

Wheatland County
John Oiestad
632-5534

Wibaux County
Katrina Johnson
796-2211

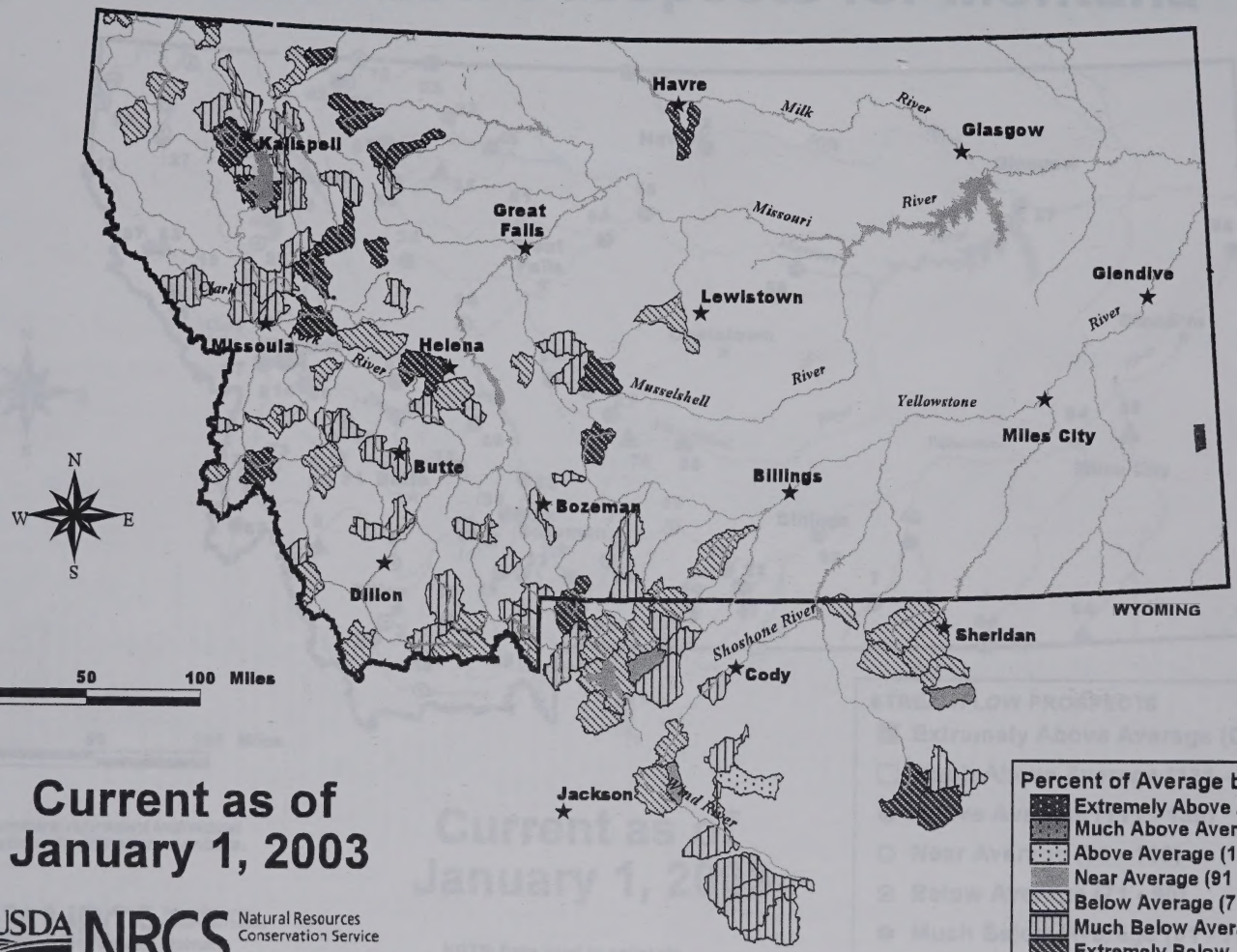
Yellowstone County
Shad Weber
657-6135

12/19/02

UNITED STATES DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

Mountain Snow Water Equivalent



Current as of January 1, 2003

USDA NRCS Natural Resources Conservation Service Montana

http://www.mt.nrcs.usda.gov

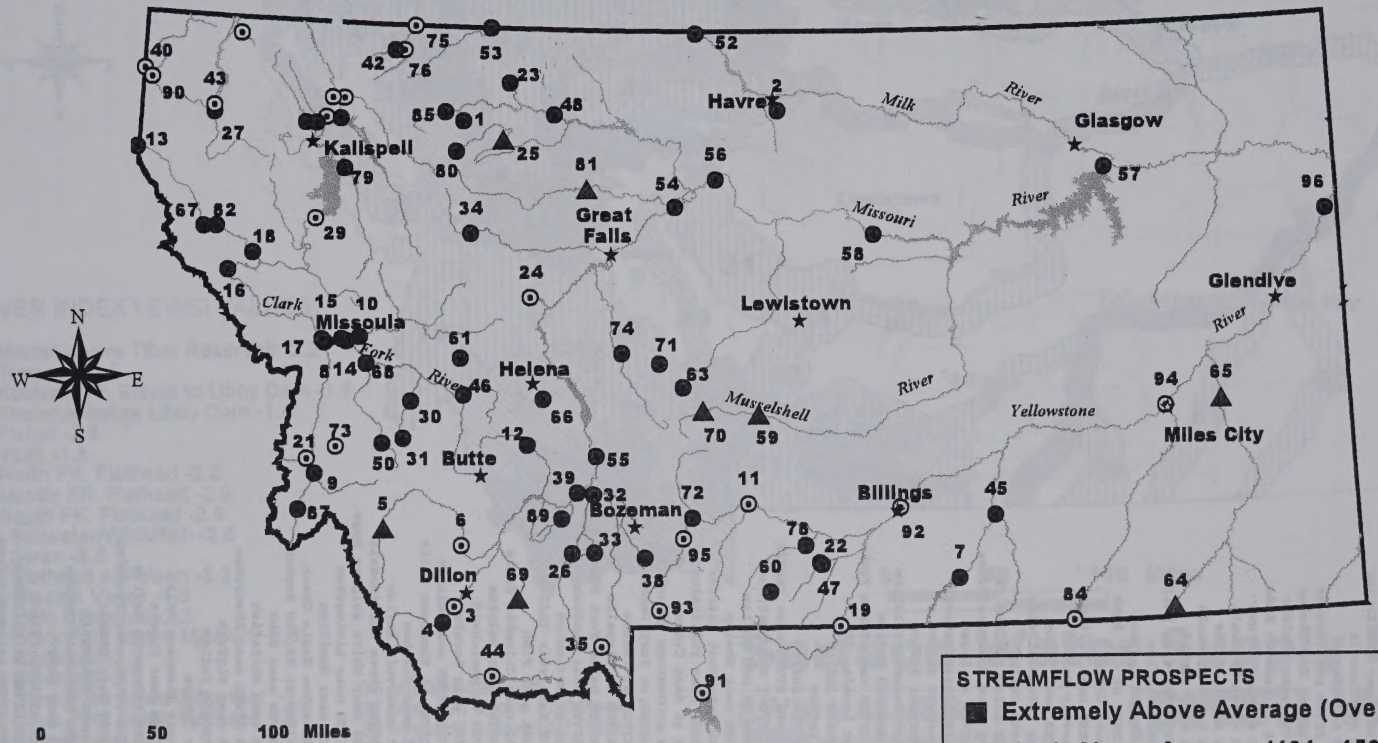
Percent of Average by Sub-Basin

- Extremely Above Average (Over 150)
- Much Above Average (131 - 150)
- Above Average (111 - 130)
- Near Average (91 - 110)
- Below Average (71 - 90)
- Much Below Average (51 - 70)
- Extremely Below Average (Below 51)

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

Montana Water Education Project

Streamflow Prospects for Montana



Numbers represent individual station identification numbers.

Current as of January 1, 2003

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STREAMFLOW PROSPECTS

- ■ Extremely Above Average (Over150)
- □ Much Above Average (131 - 150)
- ● Above Average (111 - 130)
- ○ Near Average (91 - 110)
- ⊙ Below Average (71 - 90)
- ● Much Below Average (51 - 70)
- ▲ Extremely Below Average (Below 51)

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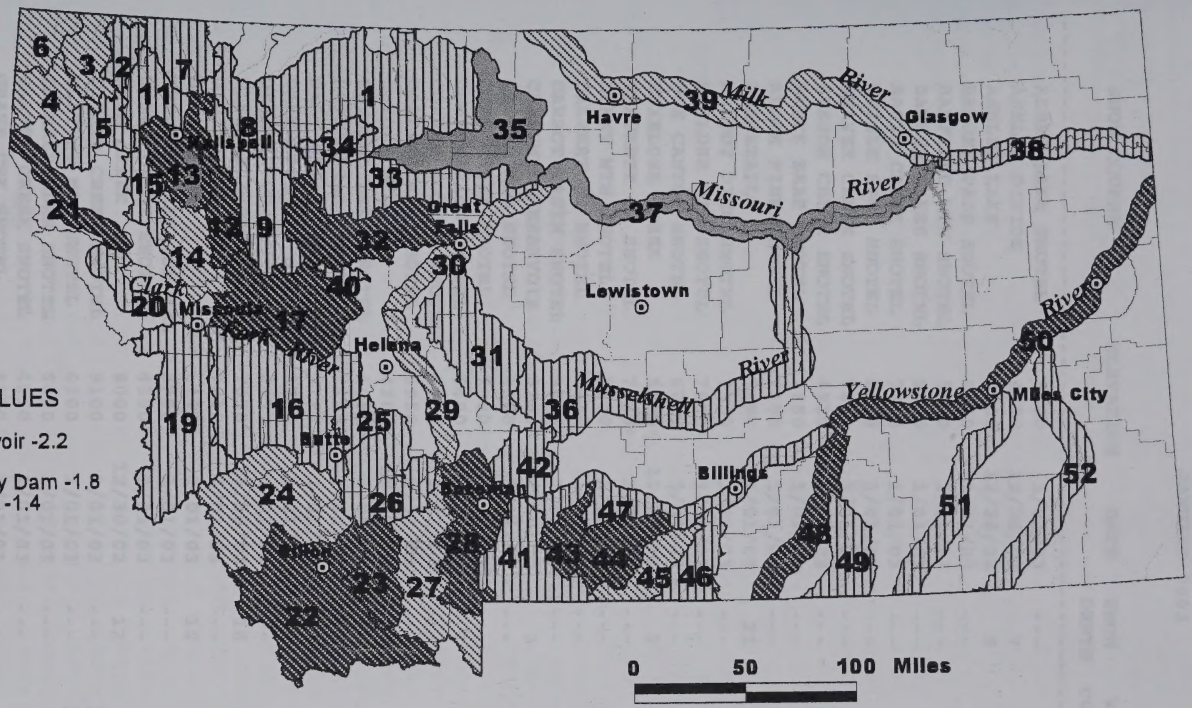
Map #	Forecast Point
1	BADGER CREEK near Browning
2	BEAVER CREEK near Havre
3	BEAVERHEAD RIVER at Barretts
4	CLARK CANYON RES Inflow
5	BIG HOLE RIVER at Wisdom
6	BIG HOLE RIVER near Melrose
7	BIGHORN RIVER near St. Xavier
8	BITTERROOT at Missoula
9	BITTERROOT near Darby
10	BLACKFOOT RIVER near Bonner
11	BOULDER RIVER at Big Timber
12	BOULDER RIVER near Boulder
13	CLARK FK at Whitehorse Rpds
14	CLARK FORK above Milltown
15	CLARK FORK above Missoula
16	CLARK FORK at St. Regis
17	CLARK FORK below Missoula
18	CLARK FORK near Plains
19	CLARKS FORK RIVER near Belfry
21	COMO RESERVOIR Inflow
22	COONEY RESERVOIR Inflow
23	CUT BANK CREEK at Cut Bank
24	DEARBORN near Craig
25	DUPUYER CREEK near Valier
26	ENNIS Reservoir Inflow
27	FISHER RIVER near Libby
28	FLATHEAD at Columbia Falls
29	FLATHEAD Lake Inflow
30	FLINT CREEK below Boulder Ck
31	FLINT CREEK near Southern Cross
32	GALLATIN RIVER at Logan
33	GALLATIN RIVER near Gateway
34	GIBSON Reservoir Inflow
35	HEBGEN Reservoir Inflow
36	HUNGRY HORSE Reservoir Inflow
38	HYALITE RESERVOIR Inflow
39	JEFFERSON RIVER near Three Forks
40	KOOTENAI at Leonia
42	LAKE SHERBURNE Inflow
43	LIBBY RES Inflow
44	LIMA RESERVOIR Inflow
45	LITTLE BIGHORN RIVER near Hardin
46	LITTLE BLACKFOOT near Garrison
47	LOWER WILLOW CK RES Inflow
48	MARIAS RIVER near Shelby
49	MF FLATHEAD near West Glacier
50	MF ROCK CREEK near Philipsburg
52	MILK RIVER at East Cross.
53	MILK RIVER at Western Crossing
54	MISSOURI RIVER at Fort Benton
55	MISSOURI RIVER at Toston
56	MISSOURI RIVER at Virgelle
57	MISSOURI RIVER below Fort Peck
58	MISSOURI RIVER near Landusky
59	MUSSELSHELL at Harlowton
60	MYSTIC LAKE Reservoir Inflow
61	NEVADA CREEK near Finn
62	NF FLATHEAD near Columbia Falls
63	NF MUSSELSHELL near Delpine
64	POWDER RIVER at Moorehead
65	POWDER RIVER near Locate
66	PRICKLY PEAR CREEK near Clancy
67	PROSPECT CREEK at Thompson Falls
68	ROCK CREEK near Clinton
69	RUBY RIVER Reservoir Inflow
70	SF MUSSELSHELL above Martinsdale
71	SHEEP CREEK near White Sulphur Spgs.
72	SHIELDS RIVER near Livingston
73	SKALKAHO CK near Hamilton
74	SMITH RIVER above Eagle Creek
75	ST. MARY RIVER at US/CAN Border
76	ST. MARY RIVER near Babb
77	STILLWATER near Whitefish
78	STILLWATER RIVER near Absarokee
79	SWAN RIVER near Bigfork
80	SWIFT RESERVOIR Inflow
81	TETON near Dutton
82	THOMPSON near Thompson Falls
83	TOBACCO RIVER near Eureka
84	TONGUE RIVER RESERVOIR Inflow
85	TWO MEDICINE RIVER near Browning
87	WF BITTERROOT near Conner
88	WHITEFISH near Kalispell
89	WILLOW CREEK Reservoir Inflow
90	YAAK RIVER near Troy
91	YELLOWSTONE at Lake Outlet
92	YELLOWSTONE RIVER at Billings
93	YELLOWSTONE RIVER at Corwin Spgs
94	YELLOWSTONE RIVER at Miles City
95	YELLOWSTONE RIVER near Livingston
96	YELLOWSTONE RIVER near Sidney

UNITED STATES DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE



RIVER INDEX \ SWSI VALUES

1 Marias above Tiber Reservoir -2.2
2 Tobacco -2.3
3 Kootenai Ft. Steele to Libby Dam -1.8
4 Kootenai below Libby Dam -1.4
5 Fisher -2.8
6 Yaak -1.8
7 North FK. Flathead -2.2
8 Middle FK. Flathead -2.9
9 South FK. Flathead -2.9
11 Stillwater/Whitefish -2.8
12 Swan -3.5
13 Flathead at Polson -3.3
14 Mission Valley -1.5
15 Little Bitterroot -2.2
16 Clark Fork above Milltown -2.8
17 Blackfoot -3.2
19 Bitterroot -2.5
20 Clark Fork below Bitterroot -2.8
21 Clark Fork below Flathead -3.1
22 Beaverhead -3.3
23 Ruby -3.3
24 Big Hole -1.9
25 Boulder (Jefferson) -2.3
26 Jefferson -2.6
27 Madison -1.9
28 Gallatin -3.1
29 Missouri above Canyon Ferry -1.9
30 Missouri below Canyon Ferry -1.5
31 Smith -2.1
32 Sun -3.4
33 Teton -2.6
34 Birch/Dupuyer Creeks -2
35 Marias -0.3
36 Musselshell -2.8
37 Missouri above Fort Peck -0.8
38 Missouri below Fort Peck -2.5
39 Milk -1.8
40 Dearborn near Craig -2
41 Yellowstone above Livingston -2.5
42 Shields -2.3
43 Boulder (Yellowstone) -3
44 Stillwater -3
45 Rock/Red Lodge Creeks -1.8
46 Clarks Fork -2.8
47 Yellowstone above Bighorn -2.7
48 Bighorn below Bighorn Lake -3.7
49 Little Bighorn -2.3
50 Yellowstone below Bighorn -3.2
51 Tongue -2.9
52 Powder -2.9

Surface Water Supply Index (SWSI) Values

Current as of January 1, 2003

SWSI VALUES

- Extremely Dry -4.0 to -3.0
- Moderately Dry -2.9 to -2.0
- Slightly Dry -1.9 to -1.0
- Near Average -0.9 to 0.9
- Slightly Wet 1.0 to 1.9
- Moderately Wet 2.0 to 2.9
- Extremely Wet 3.0 to 4.0
- SWSI Not Applicable

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

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SNOTEL AND SNOW COURSE SUMMARY

JANUARY 2003

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ALBRO LAKE SNOTEL	8300	1/01/03	---	4.9	5.9	9.6
ASHLEY DIVIDE	4820	12/28/02	7	1.0	2.6	3.4
ASHLEY LAKE	4000	12/28/02	5	.7	2.0	2.6
BADGER PASS SNOTEL	6900	1/01/03	---	7.0	10.5	15.2
BANFIELD MTN SNOTEL	5600	1/01/03	---	7.1	8.5	9.0
BARKER LAKES SNOTEL	8250	1/01/03	---	4.3	4.5	6.7
BASIN CREEK SNOTEL	7180	1/01/03	---	2.4	2.2	3.7
BEAGLE SPGS SNOTEL	8850	1/01/03	---	2.7	2.5	3.7
BEAVER CREEK SNOTEL	7850	1/01/03	---	4.6	9.3	7.9
BISSON CREEK SNOTEL	4920	1/01/03	---	1.6	2.4	4.5
BLACK BEAR SNOTEL	7950	1/01/03	---	14.0	18.6	17.2
BLACK PINE SNOTEL	7100	1/01/03	---	3.3	2.3	5.2
BLACKTAIL	5650	1/01/03	21	4.3	4.8	6.8
BLOODY DICK SNOTEL	7550	1/01/03	---	3.8	3.7	5.6
BOULDER MTN SNOTEL	7950	1/01/03	---	7.6	9.3	9.1
BOX CANYON SNOTEL	6700	1/01/03	---	2.5	2.4	4.5
BOXELDER CREEK	5100	12/30/02	2	.3	.5	3.4
BRACKETT CR SNOTEL	7320	1/01/03	---	5.7	8.2	8.9
BURNT MTN SNOTEL	5880	1/01/03	---	1.6	1.3	--
CALVERT CR SNOTEL	6430	1/01/03	---	3.1	3.0	3.9
CARROT BASIN SNOTEL	9000	1/01/03	---	7.5	12.6	13.1
CHESSMAN RESERVOIR	6200	12/30/02	2	.4	.6	1.5
CLOVER MDW SNOTEL	8800	1/01/03	---	5.3	7.8	8.1
COLE CREEK SNOTEL	7850	1/01/03	---	6.2	1.9	7.5
COMBINATION SNOTEL	5600	1/01/03	---	2.3	1.4	2.2
COPPER BOTTOM SNOTEL	5200	1/01/03	---	2.9	3.7	5.3
COPPER CAMP SNOTEL	6950	1/01/03	---	8.4	12.5	13.7
COYOTE HILL	4200	12/27/02	9	1.0	3.0	4.3
CRYSTAL LAKE SNOTEL	6050	1/01/03	---	3.9	1.8	5.4
DAISY PEAK SNOTEL	7600	1/01/03	---	2.4	3.5	4.7
DALY CREEK SNOTEL	5780	1/01/03	---	3.7	3.1	4.9
DARKHORSE LK. SNOTEL	8700	1/01/03	---	7.7	11.8	13.9
DEADMAN CR SNOTEL	6450	1/01/03	---	2.9	2.0	4.6
DISCOVERY BASIN	7050	12/30/02	16	2.9	1.8	4.2
DIVIDE SNOTEL	7800	1/01/03	---	3.3	3.7	4.8
DIX HILL	6400	1/01/03	10	1.6	3.3	4.5
DUPUYER CREEK SNOTEL	5750	1/01/03	---	1.0	1.3	4.4
EMERY CREEK SNOTEL	4350	1/01/03	---	4.5	5.4	7.0
FISH CREEK	8000	12/30/02	12	2.0	2.2	4.4
FISHER CREEK SNOTEL	9100	1/01/03	---	10.9	13.5	16.3
FLATTOP MTN SNOTEL	6300	1/01/03	---	16.6	19.0	21.4
FROHNER MDWS SNOTEL	6480	1/01/03	---	2.5	2.1	3.4
GARVER CREEK SNOTEL	4250	1/01/03	---	4.4	5.6	5.2
GRAVE CRK SNOTEL	4300	1/01/03	---	5.9	5.2	7.7
HAND CREEK SNOTEL	5030	1/01/03	---	3.4	3.6	5.9
HAWKINS LAKE SNOTEL	6450	1/01/03	---	10.4	12.3	12.4
HEBGEN DAM	6550	12/31/02	16	3.3	4.2	5.1
HELL ROARING DIVIDE	5770	12/30/02	36	7.7	13.9	13.4
HOLBROOK	4530	1/01/03	---	2.0E	2.4	4.2
HOODOO BASIN SNOTEL	6050	1/01/03	---	12.0	20.0	19.3
JOHNSON PARK	6450	12/30/02	7	1.1	1.8	2.8
KRAFT CREEK SNOTEL	4750	1/01/03	---	3.7	3.7	6.9
LAKEVIEW RDG. SNOTEL	7400	1/01/03	---	4.4	5.7	5.1
LEMHI RIDGE SNOTEL	8100	1/01/03	---	3.8	3.0	4.7
LICK CREEK SNOTEL	6860	1/01/03	---	2.8	2.1	5.3
LONE MOUNTAIN SNOTEL	8880	1/01/03	---	4.8	8.7	7.9
LOWER TWIN SNOTEL	7900	1/01/03	---	5.0	5.9	8.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
LUBRECHT SNOTEL	4680	1/01/03	---	1.6	2.3	2.6
LUBRECHT FOREST NO 3	5450	12/30/02	5	.6	2.0	2.7
LUBRECHT FOREST NO 4	4650	12/30/02	3	.5	1.3	1.4
LUBRECHT FOREST NO 6	4040	12/30/02	3	.5	1.6	1.6
LUBRECHT HYDROPLOT	4200	12/30/02	5	.3	2.0	2.5
MADISON PLT SNOTEL	7750	1/01/03	---	7.4	10.3	11.2
MANY GLACIER SNOTEL	4900	1/01/03	---	3.4	4.3	7.0
MARIAS PASS	5250	1/02/03	16	3.4	5.3	7.3
MONUMENT PK SNOTEL	8850	1/01/03	---	6.6	9.4	9.9
MOSS PEAK SNOTEL	6780	1/01/03	---	10.2	13.5	16.8
MOULTON RESERVOIR	6850	12/24/02	9	1.5	1.1	3.5
MT LOCKHART SNOTEL	6400	1/01/03	---	5.3	5.6	9.5
MULE CREEK SNOTEL	8300	1/01/03	---	4.1	6.4	6.9
N.E. ENTRANCE SNOTEL	7350	1/01/03	---	2.7	2.9	5.0
NEVADA RIDGE SNOTEL	7020	1/01/03	---	5.0	4.6	6.8
NEZ PERCE CMP SNOTEL	5650	1/01/03	---	5.0	5.2	6.1
N.F. ELK CR SNOTEL	6250	1/01/03	---	3.1	4.1	5.1
NF JOCKO SNOTEL	6330	1/01/03	---	11.1	19.4	19.4
NOISY BASIN SNOTEL	6040	1/01/03	---	10.5	16.8	19.8
OPHIR PARK	7150	1/01/03	16	2.9	4.4	6.6
PETERSON MDW SNOTEL	7200	1/01/03	---	3.1	1.7	4.4
PICKFOOT CRK SNOTEL	6650	1/01/03	---	4.3	3.0	5.2
PIKE CREEK SNOTEL	5930	1/01/03	---	6.0	7.5	12.0
PIPESTONE PASS	7200	12/29/02	5	.8	1.0	2.2
PLACER BASIN SNOTEL	8830	1/01/03	---	4.9	6.1	8.7
POORMAN CR SNOTEL	5100	1/01/03	---	10.6	16.1	13.4
PORCUPINE SNOTEL	6500	1/01/03	---	1.7	1.1	2.8
ROCKER PEAK SNOTEL	8000	1/01/03	---	3.9	4.5	6.4
ROCKY BOY SNOTEL	4700	1/01/03	---	.4	.0	2.2
SACAJAWEA SNOTEL	6550	1/01/03	---	4.5	4.7	5.1
SADDLE MTN SNOTEL	7900	1/01/03	---	5.1	9.5	11.7
S.F. SHIELDS SNOTEL	8100	1/01/03	---	2.3	2.8	7.5
SHORT CREEK SNOTEL	7000	1/01/03	---	2.0	1.8	2.9
SHOWER FALLS SNOTEL	8100	1/01/03	---	5.6	7.9	10.1
SKALKAHO SNOTEL	7260	1/01/03	---	6.8	8.5	10.3
SLEEPING WOMAN SNTL	6150	1/01/03	---	4.5	5.1	6.9
SPOTTED BEAR MTN.	7000	1/01/03	---	3.7E	5.1	6.9
SPUR PARK SNOTEL	8100	1/01/03	---	6.3	6.7	10.0
STAHL PEAK SNOTEL	6030	1/01/03	---	14.1	17.3	17.1
STORM LAKE	7780	12/30/02	18	2.9	2.6	5.5
STUART MOUNTAIN SNTL	7400	1/01/03	---	8.1	15.6	15.1
SUCKER CREEK	3960	12/30/02	0	.0	.0	.5
TAYLOR ROAD	4080	12/30/02	0	.0	.0	1.8
TEN MILE LOWER	6600	12/30/02	9	1.2	1.6	3.0
TEN MILE MIDDLE	6800	12/30/02	13	1.9	2.4	4.6
TEPEE CREEK SNOTEL	8000	1/01/03	---	4.3	7.0	6.0
TIZER BASIN SNOTEL	6840	1/01/03	---	2.9	3.2	4.8
TRINKUS LAKE	6100	1/01/03	---	12.8E	17.5	19.4
TRUMAN CREEK	4060	12/31/02	7	1.2	1.8	2.0
TV MOUNTAIN	6800	1/01/03	---	4.2E	6.8	7.8
TWELVEMILE SNOTEL	5600	1/01/03	---	5.8	6.6	7.5
TWENTY-ONE MILE	7150	12/30/02	23	3.5	6.7	7.3
TWIN LAKES SNOTEL	6400	1/01/03	---	11.8	17.9	17.5
UPPER HOLLAND LAKE	6200	1/01/03	---	9.1E	14.5	15.2
WALDRON SNOTEL	5600	1/01/03	---	2.5	1.7	5.2
WARM SPRINGS SNOTEL	7800	1/01/03	---	6.4	7.9	9.4
WEASEL DIVIDE	5450	12/30/02	36	7.3	16.3	15.2
WEST YELL'ST SNOTEL	6700	1/01/03	---	3.5	4.5	5.9
WHISKEY CREEK SNOTEL	6800	1/01/03	---	5.0	7.0	7.5
WHITE MILL SNOTEL	8700	1/01/03	---	7.6	9.6	11.1
WOOD CREEK SNOTEL	5960	1/01/03	---	1.6	2.4	4.2

Montana Water Supply Outlook Report as of January 1, 2003

The snowfall season has gotten off to a very slow start and slower than last year at this time. The mountain snowpack distribution this year is generally like last year where low and mid elevation mountain snowpack is generally worse than the high elevation mountain snowpack. So far this winter, the El Nino forecast for above average temperatures and below average precipitation has held true.

Snowpack

Mountain snowpacks are quite variable across the state for this time of year and generally 20 to 30 percent below last year. Mountain snow water content statewide was 63 percent of average and 77 percent of last year. West of the Continental Divide, mountain snow water content was 61 percent of average and 71 percent of last year and East of the Continental Divide, was 66 percent of average and 88 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	61	71
KOOTENAI	73	71
FLATHEAD	59 (3rd lowest of record)	69
UPPER CLARK FORK	56 (2nd lowest of record)	74
BITTERROOT	66 (4th lowest of record)	79
LOWER CLARK FORK	59 (4th lowest of record)	60
MISSOURI	61	81
MISSOURI HEADWATERS	65	76
JEFFERSON	62 (4th lowest of record)	83
MADISON	66	70
GALLATIN	59 (3rd lowest of record)	65
MISSOURI MAINSTEM	55	96
HEADWATERS MAINSTEM	64 (5th lowest of record)	90
SMITH-JUDITH-MUSSELSHELL	68 (4th lowest of record)	110
SUN-TETON-MARIAS	46 (new record low)	81
MAINSTEM ABOVE FT. PECK RES	57	94
MILK	9 (2nd lowest of record..	140
ST. MARY	70	86
ST. MARY & MILK	57	87
YELLOWSTONE	70	96
UPPER YELLOWSTONE	69	92
LOWER YELLOWSTONE (WYOMING)	73 (3rd lowest of record)	102
WIND	72	100
SHOSHONE	74	105
BIGHORN	70	98
TONGUE	77	101
POWDER	67	91

Precipitation

December mountain and valley precipitation across the state was 64 percent of average and 82 percent of last year, while the water year precipitation was 58 percent of average and 69 percent of last year.

West of the Continental Divide, December mountain and valley precipitation was 72 percent of average and 82 percent of last year and the water year precipitation was 59 percent of average and 61 percent of last year. East of the Divide, December mountain and valley precipitation was 56 percent of average and 83 percent of last year and the water year precipitation was 57 percent of average and 77 percent of last year.

RIVER BASIN	DECEMBER % OF AVERAGE	WATER YEAR % OF AVERAGE
COLUMBIA	72	59
KOOTENAI	95	69
FLATHEAD	69	58
UPPER CLARK FORK	55	54
BITTERROOT	63	56
LOWER CLARK FORK	80	60
MISSOURI	56	59
JEFFERSON	63	57
MADISON	70	62
GALLATIN	42	49
MISSOURI MAINSTEM	53	63
SMITH-JUDITH-MUSSELSHELL	50	64
SUN-TETON-MARIAS	59	54
MILK	15	65
ST. MARY	86	62
YELLOWSTONE	51	67
UPPER YELLOWSTONE	58	66
LOWER YELLOWSTONE (WYOMING)	49	68
WIND	45	75
SHOSHONE	76	79
BIGHORN	24	69
TONGUE	28	82
POWDER	54	83

Reservoirs

Major reservoir storages statewide were 88 percent of average and 98 percent of last year.

Reservoir storage west of the Continental Divide was 111 percent of average and 97 percent of last year. East of the Continental Divide, reservoir storages were 79 percent of average and 98 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	111	97
KOOTENAI	121	101
FLATHEAD	103	94
UPPER CLARK FORK	94	107
BITTERROOT	56	58
LOWER CLARK FORK	102	102
MISSOURI	79	98
JEFFERSON	35	75
MADISON	110	101
GALLATIN	132	84
MISSOURI MAINSTEM	78	96
SMITH-JUDITH-MUSSELSHELL	31	139
SUN-TETON-MARIAS	118	131
MILK	108	422
ST. MARY	39	70
YELLOWSTONE	73	87
UPPER YELLOWSTONE	116	128
LOWER YELLOWSTONE	71	86

Streamflow

Across Montana, streamflows are forecast to range between 50 and 64 percent of average for the period April 1 through July 31.

West of the Continental Divide, streamflows are forecast to range between 51 and 65 percent of average and east of the Continental Divide, streamflows are forecast to range between 49 and 63 percent of average.

Below are the River Basin streamflow forecasts for the period April 1 through July 31. THESE FORECASTS ASSUME NEAR NORMAL MOISTURE AND RUNOFF CONDITIONS JANUARY THROUGH JULY AND DO NOT ACCOUNT FOR WELL BELOW AVERAGE (70% or less) OR ABOVE AVERAGE (110% or more) SNOWMELT OR SPRING RAIN.

RIVER BASIN	April-July THIS YEAR % OF AVERAGE	April-July LAST YEAR % OF AVERAGE
COLUMBIA	51 to 65	60 to 74
KOOTENAI	62 to 74	66 to 79
FLATHEAD	57 to 65	63 to 72
UPPER CLARK FORK	42 to 60	50 to 68
BITTERROOT	52 to 66	66 to 79
LOWER CLARK FORK	47 to 62	56 to 70
MISSOURI	46 to 61	43 to 59
JEFFERSON	43 to 60	43 to 65
MADISON	65 to 74	60 to 69
GALLATIN	53 to 66	56 to 69
MISSOURI MAINSTEM	50 to 68	39 to 57
SMITH-JUDITH-MUSSELSHELL	42 to 54	37 to 48
SUN-TETON-MARIAS	39 to 56	39 to 59
MILK	46 to 60	28 to 46
ST. MARY	68 to 75	59 to 68
YELLOWSTONE	55 to 67	48 to 60
UPPER YELLOWSTONE	60 to 72	60 to 71
LOWER YELLOWSTONE	47 to 60	37 to 49

NOTE: The *APRIL-JULY LAST YEAR % OF AVERAGE* column above, is what was forecast last year, **not** what actually occurred.

Surface Water Supply Index

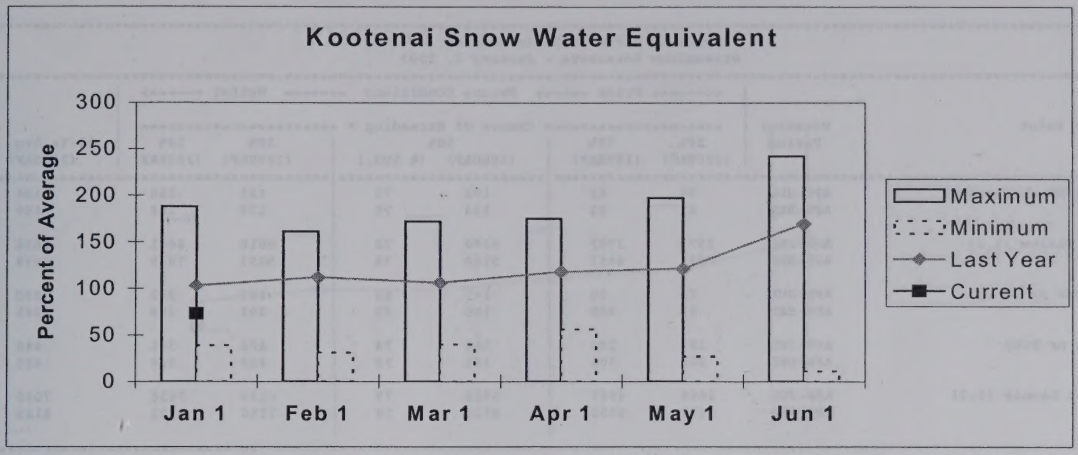
The Surface Water Supply Index (SWSI) is a measure of available surface water availability for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

SWSI RATING	SURFACE WATER CONDITION
+3.0 to +4.0	Extremely Wet
+2.0 to +3.0	Moderately Wet
+1.0 to +2.0	Slightly Wet
-1.0 to +1.0	Near Average
-1.0 to -2.0	Slightly Dry
-2.0 to -3.0	Moderately Dry
-3.0 to -4.0	Extremely Dry

SWSI	Basin
-2.3	Tobacco River
-1.8	Kootenai Ft. Steele to Libby Dam
-1.4	Kootenai River below Libby Dam
-2.8	Fisher River
-1.8	Yaak River
-2.2	North Fork Flathead River
-2.9	Middle FORK Flathead River
-2.9	South Fork Flathead River
-3.1	Flathead River at Columbia Falls
-2.8	Stillwater/Whitefish Rivers
-3.5	Swan River
-3.3	Flathead River at Polson
-1.5	Mission Valley
-2.2	Little Bitterroot River
-2.8	Clark Fork River above Milltown
-3.2	Blackfoot River
-2.5	Bitterroot River
-2.8	Clark Fork River below Bitterroot River
-3.1	Clark Fork River below Flathead River
-3.3	Beaverhead River
-3.3	Ruby River
-1.9	Big Hole River
-2.3	Boulder River (Jefferson)
-2.6	Jefferson River
-1.9	Madison River
-3.1	Gallatin River
-1.9	Missouri River above Canyon Ferry
-1.5	Missouri River below Canyon Ferry
-2.1	Smith River
-3.4	Sun River
-2.6	Teton River
-2.0	Birch/Dupuyer Creeks
-2.2	Marias River above Tiber
-0.3	Marias River below Tiber
-2.8	Musselshell River
-0.8	Missouri River above Ft. Peck
-2.5	Missouri River below Ft. Peck
-1.8	Milk River
-2.0	Dearborn River near Craig
-2.5	Yellowstone River above Livingston
-2.3	Shields River
-3.0	Boulder River (Yellowstone)
-3.0	Stillwater River
-1.8	Rock/Red Lodge Creeks
-2.8	Clarks Fork River
-2.7	Yellowstone River above Bighorn River
-3.7	Bighorn River below Bighorn Lake
-2.3	Little Bighorn River
-3.2	Yellowstone River below Bighorn River
-2.9	Tongue River
-2.9	Powder River

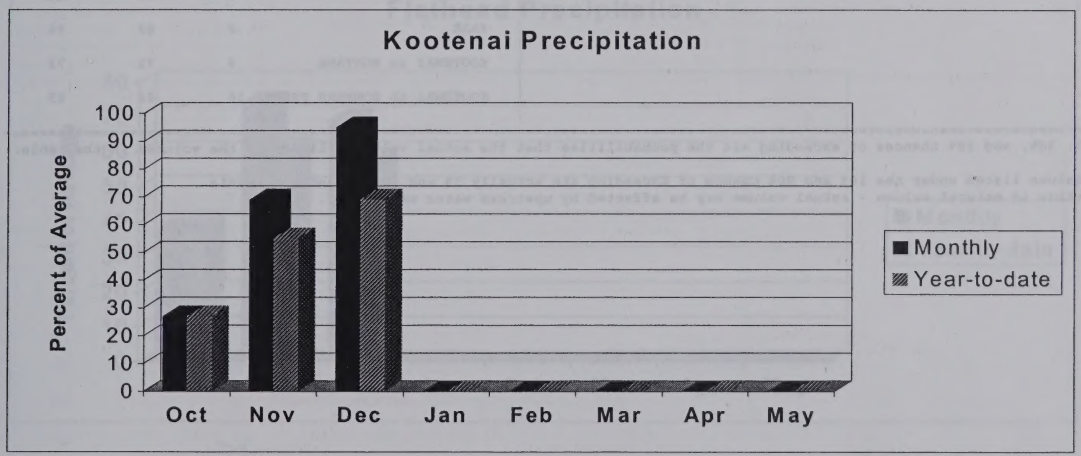
Kootenai River Basin in Montana

Snowpack conditions in the Kootenai River Basin were below average. Snow water content was 73 percent of average and 71 percent of last year.



January maximum swe was established in 1997 and minimum was in 1977; February maximum swe was in 1997 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1974 and minimum swe was in 1977; May maximum swe was in 1974 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 92 percent of average and 81 percent of last year. Valley precipitation during December was 123 percent of average and 113 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 69 percent of average and 61 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 62 percent to 74 percent.

Lake Koocanusa storage was 121 percent of average and 101 percent of last year.

Surface Water Supply Index (SWSI) was -2.3 in the Tobacco River; -1.8 in the Kootenai Ft. Steele to Libby Dam; -1.4 in the Kootenai River below Libby Dam; -2.8 in the Fisher River; and -1.8 in the Yaak River.

KOOTENAI RIVER BASIN in Montana
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
TOBACCO RIVER nr Eureka	APR-JUL	54	83	102	75	121	150	136
	APR-SEP	62	93	114	76	135	166	150
LIBBY RES Inflow (1,2)	APR-JUL	2379	3762	4390	78	5018	6401	5638
	APR-SEP	2941	4467	5160	78	5853	7379	6638
FISHER RIVER nr Libby	APR-JUL	76	99	143	62	187	252	230
	APR-SEP	83	109	155	63	201	268	245
YAAK RIVER nr Troy	APR-JUL	189	282	345	78	408	501	440
	APR-SEP	206	301	365	79	429	524	460
KOOTENAI at Leonia (1,2)	APR-JUL	3664	4961	5550	79	6139	7436	7035
	APR-SEP	3678	5550	6400	79	7250	9122	8125

KOOTENAI RIVER BASIN in Montana
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE KOOCANUSA	5748.0	3753.0	3731.0	3090.1

KOOTENAI RIVER BASIN in Montana
Watershed Snowpack Analysis - January 1, 2003

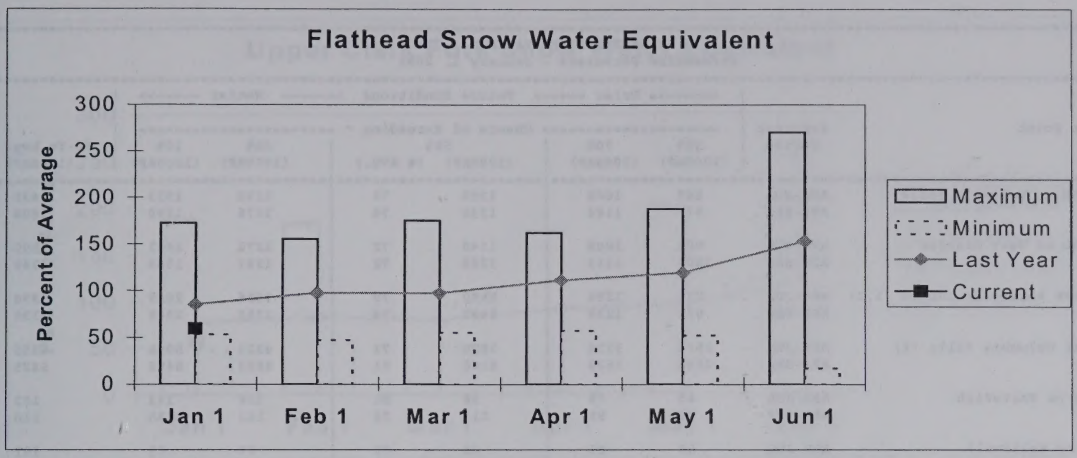
Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
KOOTENAY in CANADA	7	64	62
KOOTENAI MAINTSTEM	3	66	75
TOBACCO	3	70	68
FISHER	1	94	58
YAAK	2	83	84
KOOTENAI in MONTANA	9	71	73
KOOTENAI ab BONNERS FERRY	16	68	69

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

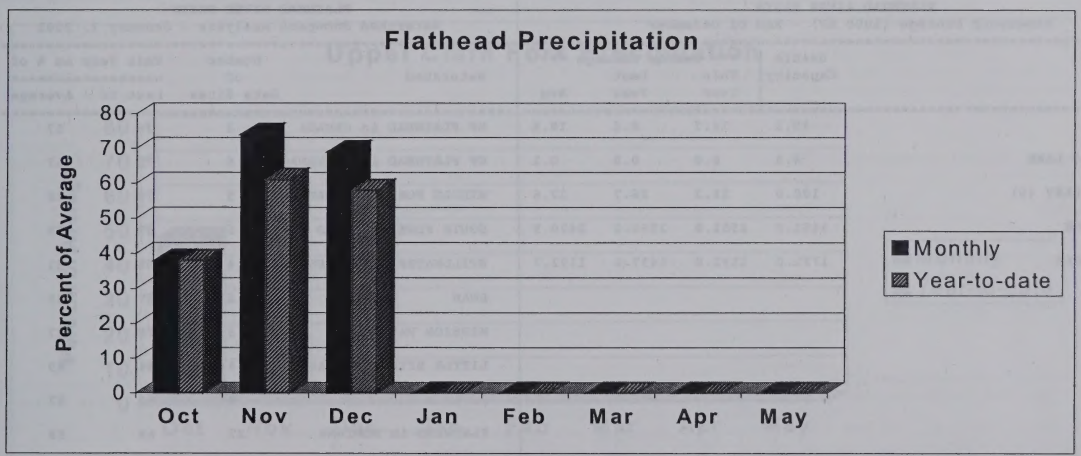
Flathead River Basin

Snowpack conditions in the Flathead River Basin were well below average and third lowest of record behind 2002 and 1988. Snow water content was 59 percent of average and 69 percent of last year.



January maximum swe was established in 1997 and minimum was in 2001; February maximum swe was in 1997 and minimum was in 2001; March maximum swe was in 1972 and minimum was in 2001; April maximum swe was in 1972 and minimum was in 2001; May maximum swe was in 1972 and minimum was in 1992; and June maximum swe was in 1974 and minimum was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 69 percent of average and 95 percent of last year. Valley precipitation during December was 54 percent of average and 103 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 46 percent of average and 56 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 57 percent to 65 percent.

Combined Camas reservoir storage was 75 percent of average and 171 percent of last year; combined Mission Valley reservoir storage was 86 percent of average and 106 percent of last year; Hungry Horse storage was at 105 percent of average and 100 percent of last year; and Flathead Lake storage was 100 percent of average and 83 percent of last year.

Surface Water Supply Index (SWSI) was -2.2 in the North Fork Flathead River; -2.9 in the Middle Fork Flathead River; -2.9 in the South Fork Flathead River; -3.1 in the Flathead River at Columbia Falls; -2.8 in the Stillwater/Whitefish Rivers; -3.5 in the Swan River; -3.3 in the Flathead River at Polson; -1.5 in the Mission Valley; and -2.2 in the Little Bitterroot River.

FLATHEAD RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
NF FLATHEAD nr Columbia Falls	APR-JUL	867	1065	1200	74	1335	1533	1630
	APR-SEP	970	1184	1330	74	1476	1690	1800
MF FLATHEAD nr West Glacier	APR-JUL	924	1009	1140	72	1271	1463	1590
	APR-SEP	1004	1113	1250	72	1387	1589	1740
HUNGRY HORSE Reservoir Inflow (1,2)	APR-JUL	771	1204	1400	70	1596	2029	1994
	APR-SEP	672	1235	1490	70	1745	2308	2124
FLATHEAD at Columbia Falls (2)	APR-JUL	2574	3316	3820	71	4324	5066	5355
	APR-SEP	2844	3628	4160	71	4692	5476	5825
STILLWATER nr Whitefish	APR-JUL	65	72	98	51	124	163	192
	APR-SEP	76	85	114	54	143	185	210
WHITEFISH nr Kalispell	APR-JUL	52	61	66	65	76	91	101
	APR-SEP	58	67	74	65	86	103	114
ASHLEY CREEK nr Marion (2)	APR-JUL	2.01	2.80	3.30	46	4.41	6.05	7.19
	MARCH			0.65	64			1.02
SWAN RIVER nr Bigfork	APR-JUL	297	343	380	67	436	519	565
	APR-SEP	337	389	430	67	492	582	645
FLATHEAD Lake Inflow (1,2)	APR-JUL	3701	4135	4400	71	4909	6028	6200
	APR-SEP	3664	4335	4770	71	5609	7455	6713

FLATHEAD RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CAMAS (4)	45.2	14.7	8.6	19.5
LOWER JOCKO LAKE	6.4	0.0	0.0	0.1
MISSION VALLEY (8)	100.0	28.2	26.7	32.6
HUNGRY HORSE	3451.0	2551.0	2560.0	2420.9
FLATHEAD LAKE	1791.0	1192.0	1437.0	1192.7

FLATHEAD RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

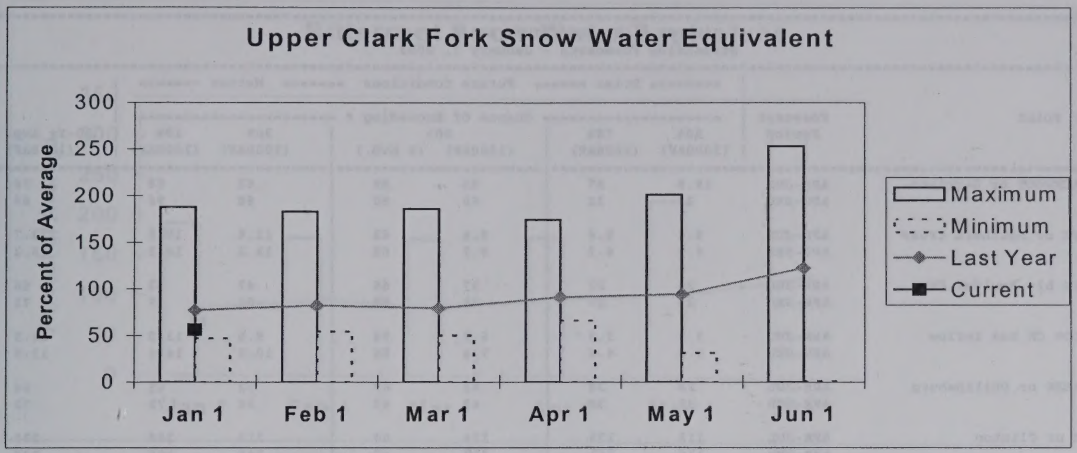
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NF FLATHEAD in CANADA	2	76	57
NF FLATHEAD in MONTANA	6	72	67
MIDDLE FORK FLATHEAD	5	79	60
SOUTH FORK FLATHEAD	6	69	59
STILLWATER-WHITEFISH	4	58	51
SWAN	6	67	59
MISSION VALLEY	3	78	57
LITTLE BITTERROOT-ASHLEY	4	64	49
JOCKO	4	59	57
FLATHEAD in MONTANA	27	69	59
FLATHEAD RIVER BASIN	29	70	58

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

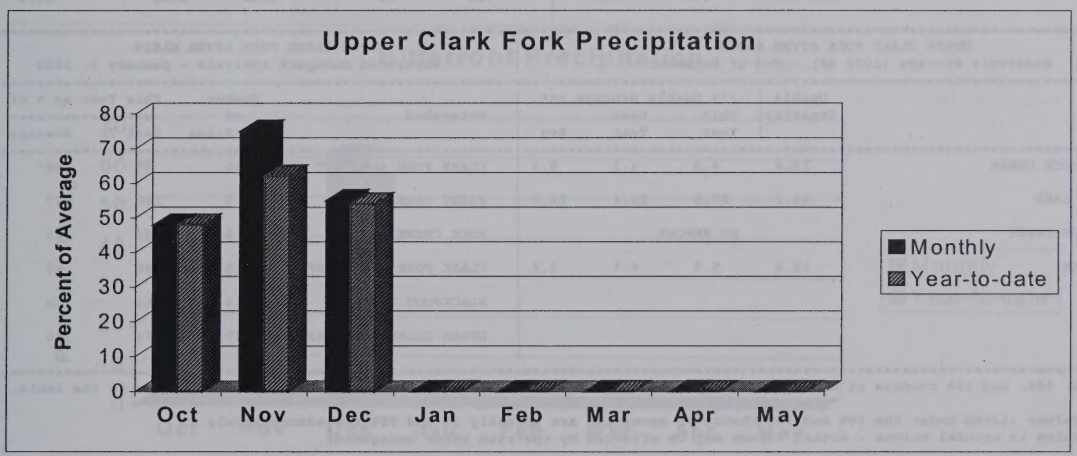
Upper Clark Fork River Basin

Snowpack conditions in the Upper Clark Fork River Basin were well below average second lowest of record behind 1977. Snow water content was 56 percent of average and 74 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum was in 1994; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during December was 55 percent of average and 78 percent of last year. Valley precipitation during December was 48 percent of average and 59 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 54 percent of average and 63 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 42 percent to 60 percent.

East Fork Rock Creek storage was 59 percent of average and 117 percent of last year; Georgetown Lake was 98 percent of average and 104 percent of last year; Lower Willow Creek storage was not available; and Nevada Creek storage was 131 percent of average and 117 percent of last year.

Surface Water Supply Index (SWSI) was -2.8 in the Clark Fork River above Milltown; and -3.2 in the Blackfoot River.

UPPER CLARK FORK RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LITTLE BLACKFOOT nr Garrison	APR-JUL	19.8	27	45	59	63	88	76
	APR-SEP	23	32	50	60	68	96	84
FLINT CREEK nr Southern Cross	APR-JUL	4.2	5.8	8.6	63	11.4	15.5	13.7
	APR-SEP	4.5	6.2	9.7	60	13.2	18.3	16.2
FLINT CREEK blw Boulder Ck	APR-JUL	20	27	37	66	47	62	56
	APR-SEP	28	37	49	69	61	79	71
LOWER WILLOW CK RES Inflow	APR-JUL	3.0	3.9	6.7	54	9.5	13.5	12.5
	APR-SEP	3.6	4.6	7.4	55	10.2	14.4	13.5
MF ROCK CREEK nr Philipsburg	APR-JUL	28	34	43	67	52	65	64
	APR-SEP	32	38	48	67	58	72	72
ROCK CREEK nr Clinton	APR-JUL	113	136	174	64	212	269	270
	APR-SEP	134	161	203	67	245	306	305
CLARK FORK abv Milltown	APR-JUL	188	237	350	58	463	629	605
	APR-SEP	225	285	410	58	535	719	705
NEVADA CREEK nr Finn	APR-JUL	4.2	5.7	9.6	56	13.5	19.2	17.3
	APR-SEP	5.1	6.8	10.8	57	14.8	21	18.9
BLACKFOOT RIVER nr Bonner	APR-JUL	326	360	465	58	570	725	805
	APR-SEP	361	404	515	58	626	790	892
CLARK FORK abv Missoula	APR-JUL	525	605	820	58	1035	1351	1415
	APR-SEP	585	692	925	58	1158	1501	1595

UPPER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
EAST FORK ROCK CREEK	15.6	4.8	4.1	8.2
GEORGETOWN LAKE	31.0	27.5	26.4	28.0
LOWER WILLOW CREEK		NO REPORT		
NEVADA CREEK	12.6	5.5	4.7	4.2

UPPER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

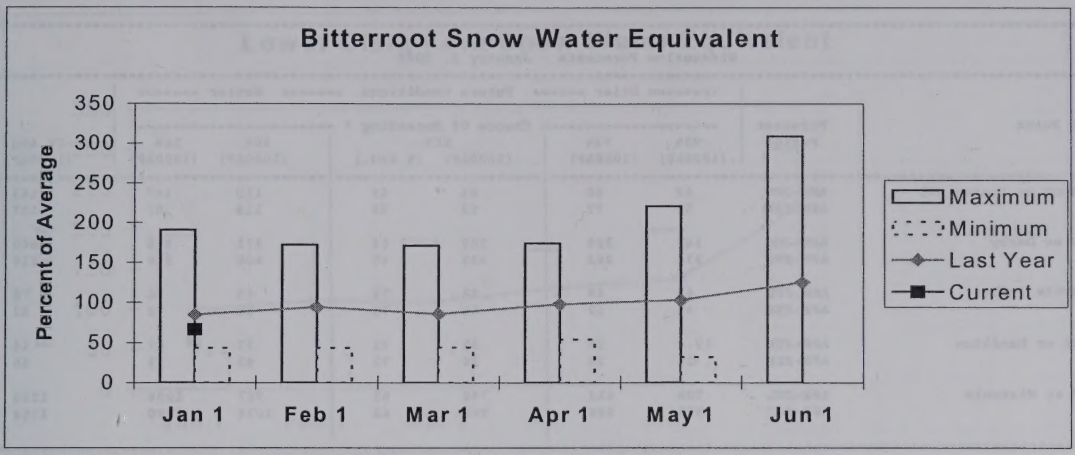
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CLARK FORK ab FLINT CREEK	10	85	56
FLINT CREEK	5	148	67
ROCK CREEK	3	100	63
CLARK FORK ab BLACKFOOT	15	96	60
BLACKFOOT	14	60	52
UPPER CLARK FORK BASIN	27	74	56

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

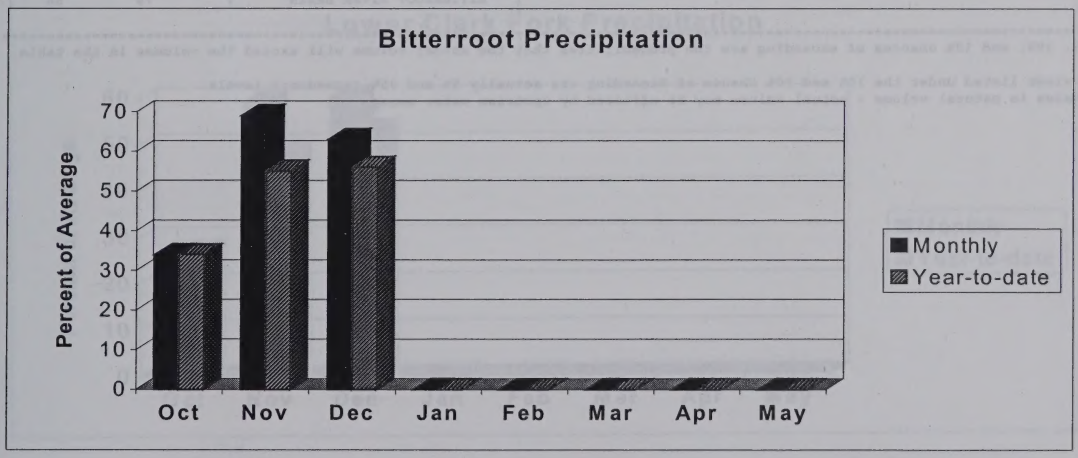
Bitterroot River Basin

Snowpack conditions in the Bitterroot River Basin were below average and fourth lowest of record. Snow water content was 66 percent of average and 79 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 2001; May maximum swe was in 1972 and minimum swe was in 1987; and June maximum swe was 1972 and 1974 and 1974 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 62 percent of average and 71 percent of last year. Valley precipitation during December was 83 percent of average and 100 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 56 percent of average and 57 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 52 percent to 66 percent.

Painted Rocks Lake storage was 85 percent of average and 73 percent of last year and Como storage was 31 percent of average and 40 percent of last year.

Surface Water Supply Index (SWSI) was -2.5 in the Bitterroot River.

BITTERROOT RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WF BITTERROOT nr Conner (2)	APR-JUL	49	60	85	59	110	147	143
	APR-SEP	53	77	92	59	118	157	157
BITTERROOT nr Darby	APR-JUL	187	229	300	65	371	476	460
	APR-SEP	216	262	335	65	408	514	514
COMO RESERVOIR Inflow	APR-JUL	43	49	57	73	65	76	78
	APR-SEP	46	52	60	73	68	79	82
SKALKAHO CK nr Hamilton	APR-JUL	19.8	25	31	71	37	47	44
	APR-SEP	24	29	36	72	43	53	50
BITTERROOT at Missoula	APR-JUL	508	613	790	63	967	1226	1250
	APR-SEP	585	686	860	63	1034	1290	1364

BITTERROOT RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PAINTED ROCKS LAKE	31.7	6.4	8.8	7.5
COMO	34.9	2.8	7.0	9.0

BITTERROOT RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

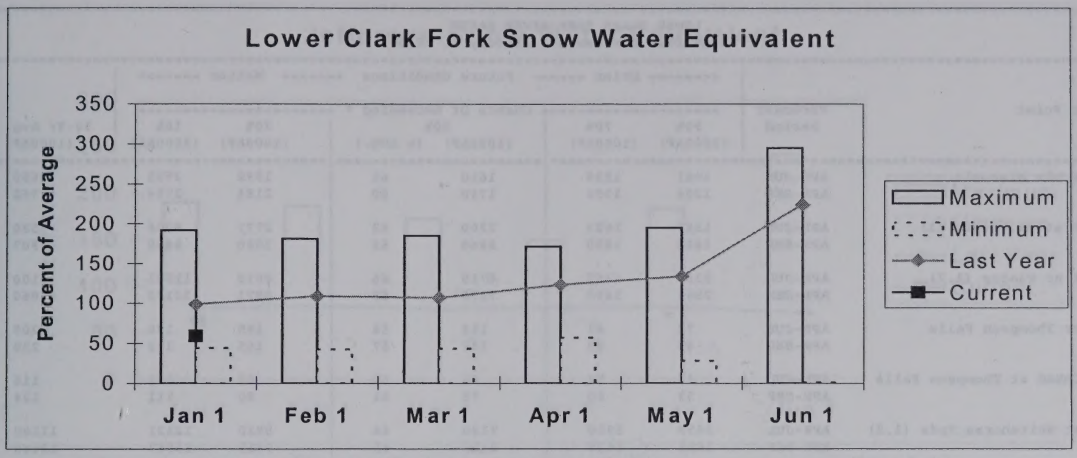
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WEST FORK BITTERROOT	2	69	57
EAST SIDE BITTERROOT	3	74	58
WEST SIDE BITTERROOT	3	79	70
BITTERROOT RIVER BASIN	7	79	66

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

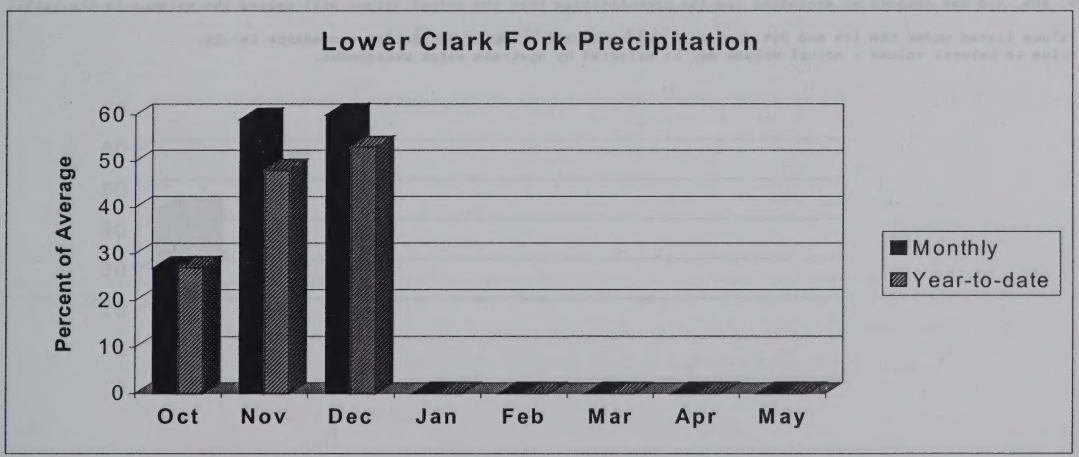
Lower Clark Fork River Basin

Snowpack conditions in the Lower Clark Fork River Basin were well below average and fourth lowest of record. Snow water content was 59 percent of average and 60 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1972 and minimum swe was in 1981; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1977. Average is for the period 1971 through 2000.

Mountain precipitation during December was 76 percent of average and 70 percent of last year. Valley precipitation during December was 97 percent of average and 103 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 60 percent of average and 53 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 47 percent to 62 percent.

Noxon Rapids storage was 102 percent of average and 102 percent of last year.

Surface Water Supply Index (SWSI) was -2.8 in the Clark Fork River below Bitterroot River and -3.1 in the Clark Fork River below Flathead River.

LOWER CLARK FORK RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
CLARK FORK blw Missoula	APR-JUL	1041	1228	1610	61	1992	2553	2660
	APR-SEP	1204	1396	1790	60	2184	2764	2962
CLARK FORK at St. Regis (1)	APR-JUL	1327	1623	2200	63	2777	4046	3520
	APR-SEP	1446	1800	2440	63	3080	4490	3907
CLARK FORK nr Plains (1,2)	APR-JUL	2339	5345	6710	66	8075	11081	10100
	APR-SEP	2564	5869	7370	67	8871	12176	11060
THOMPSON nr Thompson Falls	APR-JUL	72	83	114	56	145	190	205
	APR-SEP	85	99	132	57	165	213	230
PROSPECT CREEK at Thompson Falls	APR-JUL	48	54	68	59	82	103	116
	APR-SEP	53	60	75	61	90	111	124
CLARK FK at Whitehorse Rpds (1,2)	APR-JUL	2459	5850	7390	66	8930	12321	11280
	APR-SEP	2693	6425	8120	65	9815	13547	12460

LOWER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
NOXON RAPIDS	335.0	323.4	317.5	315.8

LOWER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

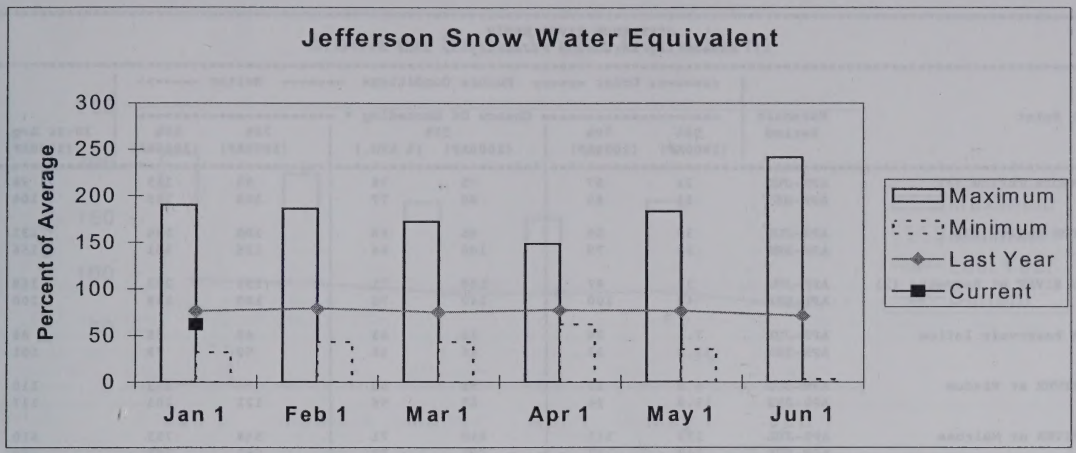
Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
LOWER CLARK FORK BASIN	8	60	59

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

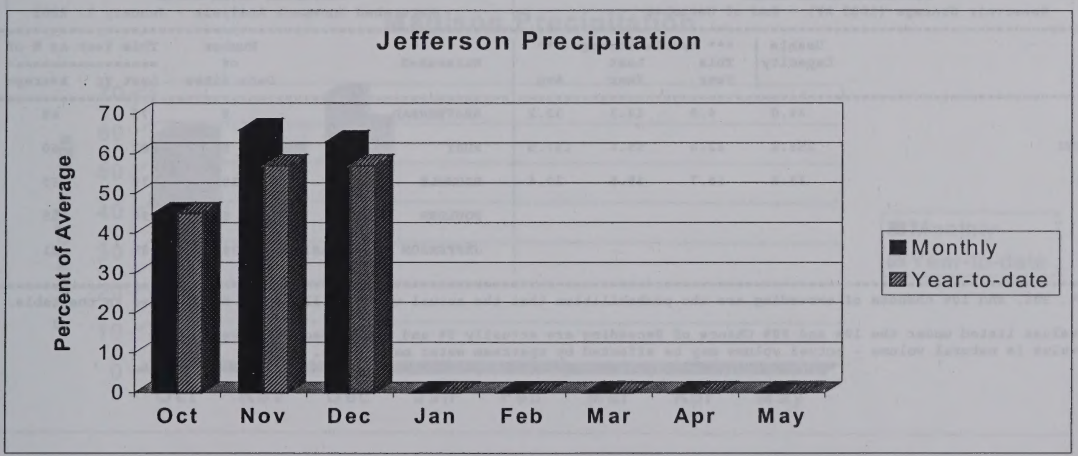
Jefferson River Basin

Snowpack conditions in the Jefferson River Basin were well below average and fourth lowest of record. Snow water content was 62 percent of average and 83 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1982 and minimum in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during December was 62 percent of average and 74 percent of last year. Valley precipitation during December was 70 percent of average and 99 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 57 percent of average and 66 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 43 percent to 60 percent.

Lima storage was 15 percent of average and 40 percent of last year; Clark Canyon storage was 31 percent of average and 70 percent of last year; and Ruby River storage was 92 percent of average and 121 percent of last year.

Surface Water Supply Index (SWSI) was -3.3 in the Beaverhead River; -3.3 in the Ruby River; -1.9 in the Big Hole River; -2.3 in the Boulder River; and -2.6 in the Jefferson River as a whole.

JEFFERSON RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LIMA RESERVOIR Inflow (2)	APR-JUL	31	57	75	78	93	119	96
	APR-SEP	31	60	80	77	100	129	104
CLARK CANYON Inflow (2)	APR-JUL	36	65	85	65	105	134	131
	APR-SEP	39	75	100	64	125	161	156
BEAVERHEAD RIVER at Barretts (2)	APR-JUL	37	87	120	71	153	203	168
	APR-SEP	42	100	140	70	180	238	200
RUBY RIVER Reservoir Inflow	APR-JUL	7.1	24	36	43	48	65	84
	APR-SEP	13.0	33	46	46	59	79	101
BIG HOLE RIVER at Wisdom	APR-JUL	6.0	35	55	50	95	153	110
	APR-SEP	13.0	34	65	56	121	203	117
BIG HOLE RIVER nr Melrose	APR-JUL	137	311	430	71	549	723	610
	APR-SEP	149	337	465	71	593	781	660
BOULDER RIVER nr Boulder	APR-JUL	16.4	32	42	54	61	90	78
	APR-SEP	17.9	34	45	53	66	96	85
WILLOW CREEK Reservoir Inflow	APR-JUL	3.0	6.7	9.3	52	14.5	22	17.9
	APR-SEP	3.2	7.6	10.6	53	16.6	25	20
JEFFERSON RIVER nr Three Forks (2)	APR-JUL	64	300	460	59	620	856	780
	APR-SEP	66	318	490	57	662	914	860

JEFFERSON RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LIMA	84.0	4.9	12.1	32.2
CLARK CANYON	255.6	42.0	59.6	137.5
RUBY RIVER	38.8	18.7	15.5	20.4

JEFFERSON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BEAVERHEAD	8	79	68
RUBY	5	82	60
BIGHOLE	10	79	59
BOULDER	6	98	55
JEFFERSON RIVER BASIN	24	83	61

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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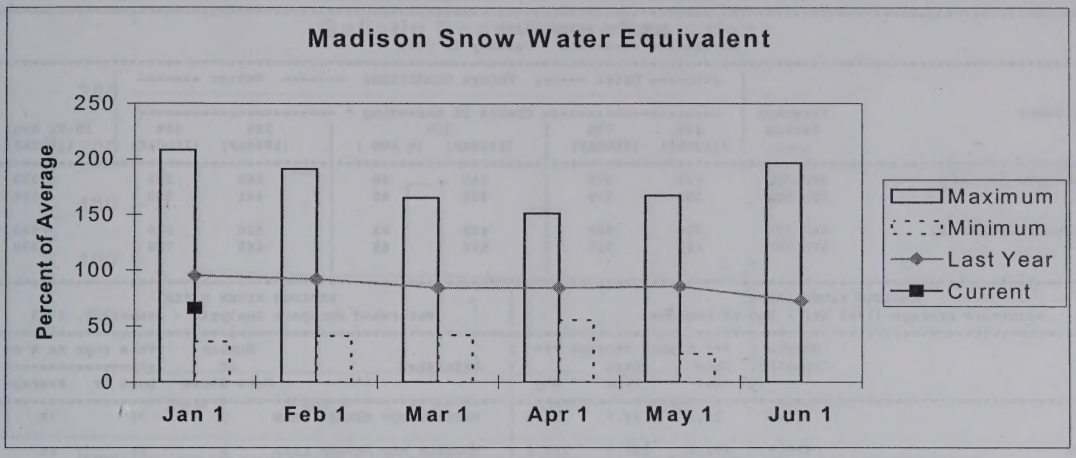
(2) - The value is natural volume - actual volume may be affected by upstream water management.

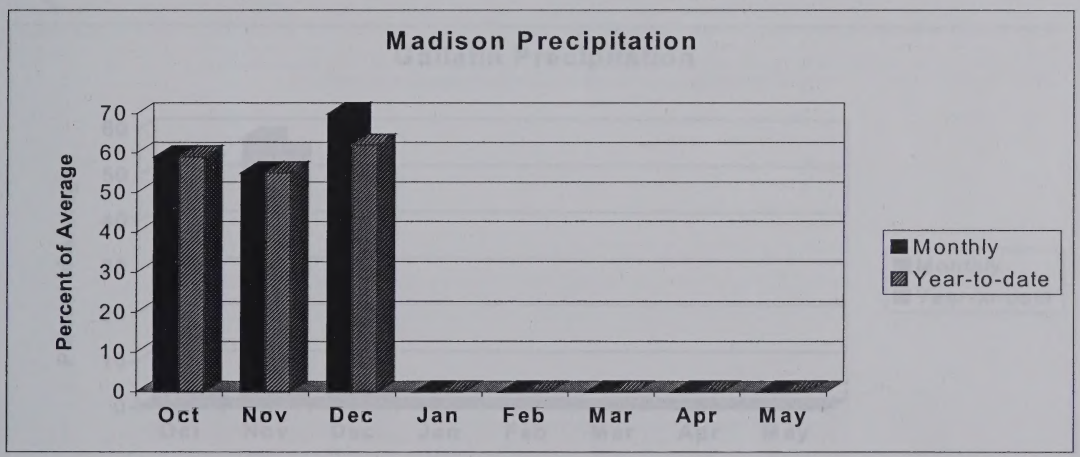
Madison River Basin

Snowpack conditions in the Madison River Basin were well below average. Snow water content was 66 percent of average and 70 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1997 and minimum swe was in 1977; and June maximum swe was in 1995 and minimum in 1987 and 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December was 70 percent of average and 69 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 62 percent of average and 61 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 65 percent to 74 percent.

Ennis Lake storage was 92 percent of average and 94 percent of last year and Hebgen Lake storage was 112 percent of average and 101 percent of last year.

Surface Water Supply Index (SWSI) was -1.9 for the Madison River.

MADISON RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HEBGEN Reservoir Inflow	APR-JUL	224	275	310	80	345	396	390
	APR-SEP	300	359	400	80	441	500	500
ENNIS Reservoir Inflow (2)	APR-JUL	314	404	465	68	526	616	680
	APR-SEP	410	517	590	69	663	770	850

MADISON RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	28.9	30.7	31.5
HEBGEN LAKE	377.5	299.4	295.9	267.6

MADISON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

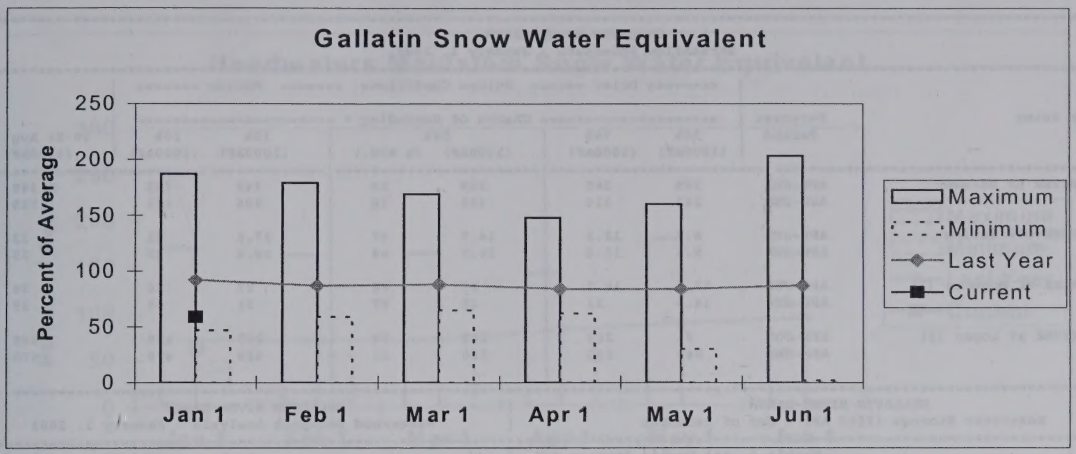
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON abv HEBGEN LAKE	6	76	70
MADISON blw HEBGEN LAKE	8	65	60
MADISON RIVER BASIN	14	70	64

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

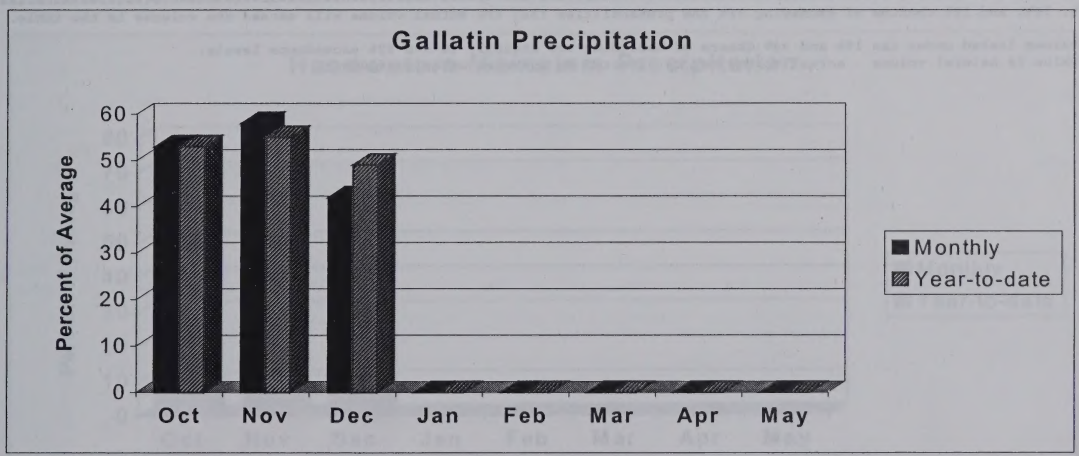
Gallatin River Basin

Snowpack conditions in the Gallatin River Basin were well below average and third lowest of record behind 1966 and 1977 and the same as 1988. Snow water content was 59 percent of average and 65 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1966; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1987; May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1975 and minimum in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 44 percent of average and 52 percent of last year. Valley precipitation during December was 18 percent of average and 21 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 49 percent of average and 53 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 53 percent to 66 percent.

Middle Creek storage was 132 percent of average and 84 percent of last year.

Surface Water Supply Index (SWSI) was -3.1 for the Gallatin River.

GALLATIN RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GALLATIN RIVER nr Gateway	APR-JUL	205	265	305	69	345	405	440
	APR-SEP	247	314	360	70	406	473	515
HYALITE RESERVOIR Inflow	APR-JUL	8.7	12.3	14.7	67	17.1	21	22
	APR-SEP	9.6	13.4	16.0	64	18.6	22	25
HYALITE CREEK nr Bozeman (2)	APR-JUL	12.5	18.7	23	68	27	34	34
	APR-SEP	14.5	21	26	67	31	38	39
GALLATIN RIVER at Logan (2)	APR-JUL	81	203	285	58	367	489	495
	APR-SEP	245	285	360	63	439	479	570

GALLATIN RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MIDDLE CREEK	10.2	5.4	6.4	4.1

GALLATIN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER GALLATIN	4	55	56
HYALITE	2	84	55
BRIDGER	2	79	73
GALLATIN RIVER BASIN	8	65	59

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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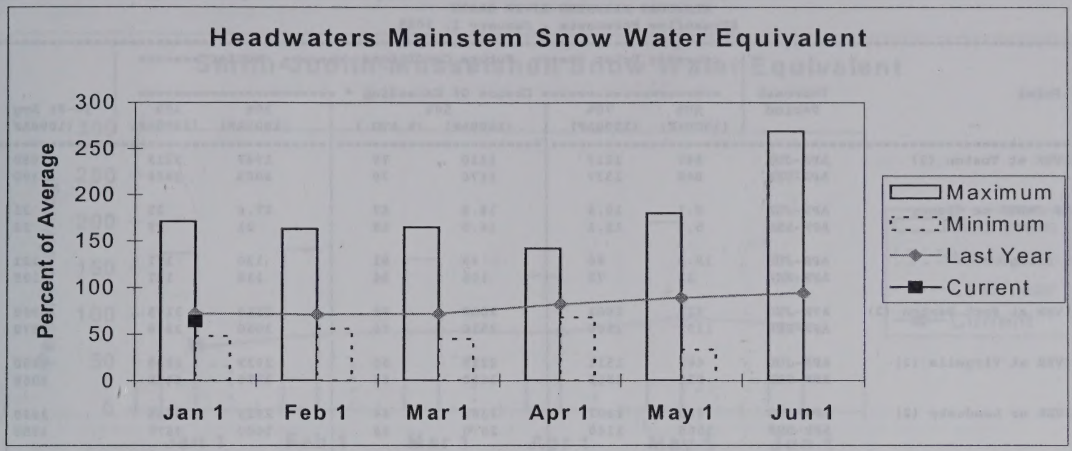
(2) - The value is natural volume - actual volume may be affected by upstream water management.

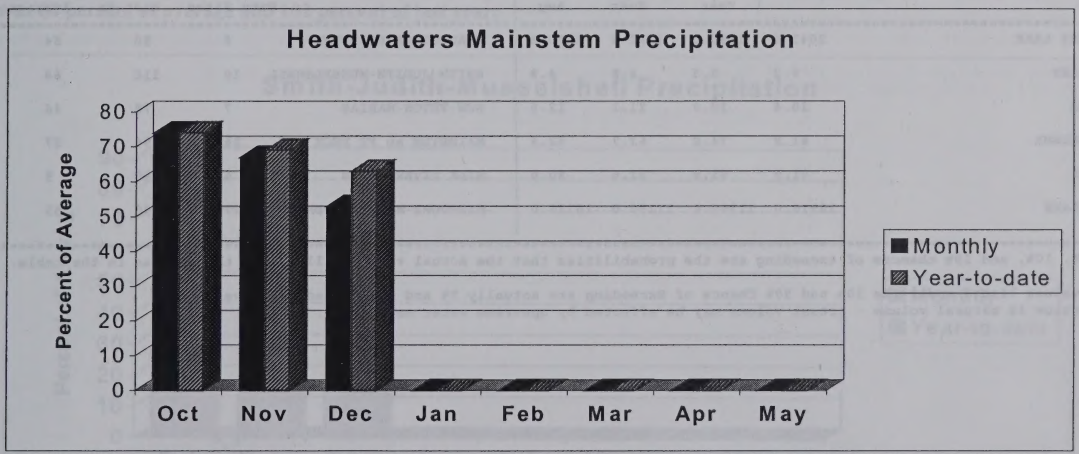
Missouri Mainstem River Basin

Snowpack conditions for the Missouri Mainstem are well below average. Snow water content is 55 percent of average and 96 percent of last year. Snowpack in the Headwaters Missouri Mainstem River Basin were well below average and fifth lowest of record. Snow water content was 64 percent of average and 90 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum swe was in 1977 and 1988; March maximum swe in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1961 and 1966; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 57 percent of average and 70 percent of last year. Valley precipitation during December was 47 percent of average and 121 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 63 percent of average and 93 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 50 to 68 percent.

Canyon Ferry Lake storage was 98 percent of average and 117 percent of last year; Helena Valley storage was 115 percent of average and 115 percent of last year; Lake Helena storage was 87 percent of average and 98 percent of last year; Hauser & Helena storage was 118 percent of average and 116 percent of last year; Holter Lake storage was 102 percent of average and 100 percent of last year; and Fort Peck Lake storage was 75 percent of average and 93 percent of last year.

Surface Water Supply Index (SWSI) was -1.9 in the Missouri River above Canyon Ferry; -1.5 in the Missouri River below Canyon Ferry; -2.0 in the Dearborn River near Craig; -0.8 in the Missouri River above Fort Peck; and -2.5 in the Missouri River below Fort Peck.

MISSOURI MAINSTEM RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MISSOURI RIVER at Toston (2)	APR-JUL	647	1113	1430	70	1747	2213	2050
	APR-SEP	846	1337	1670	70	2003	2494	2390
PRICKLY PEAR CREEK nr Clancy	APR-JUL	5.1	10.4	14.0	67	17.6	23	21
	APR-SEP	5.7	12.1	16.5	66	21	27	25
DEARBORN nr Craig	APR-JUL	19.0	66	98	81	130	177	121
	APR-SEP	23	72	105	84	138	187	125
MISSOURI RIVER at Fort Benton (2)	APR-JUL	927	1602	2060	69	2518	3193	2990
	APR-SEP	1152	1960	2510	70	3060	3868	3570
MISSOURI RIVER at Virgelle (2)	APR-JUL	460	1511	2225	65	2939	3990	3450
	APR-SEP	915	1966	2680	66	3394	4445	4060
MISSOURI RIVER nr Landusky (2)	APR-JUL	985	1807	2365	64	2923	3745	3690
	APR-SEP	1065	2140	2870	66	3600	4675	4350
MISSOURI RIVER below Fort Peck (2)	APR-JUL	629	1716	2455	66	3194	4281	3740
	APR-SEP	494	1879	2820	65	3761	5146	4330
LAKE SAKAKAWEA Inflow (2)	APR-JUL	2720	4640	5945	61	7250	9170	9740
	APR-SEP	2831	5170	6760	60	8350	10689	11200

MISSOURI MAINSTEM RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CANYON FERRY LAKE	2043.0	1635.0	1392.0	1670.3
HELENA VALLEY	9.2	5.5	4.8	4.8
LAKE HELENA	10.4	10.9	11.1	12.5
HAUSER & HELENA	61.9	74.0	63.7	62.9
HOLTER LAKE	81.9	81.8	81.6	80.0
FORT PECK LAKE	18910.0	11340.0	12150.0	15126.0

MISSOURI MAINSTEM RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

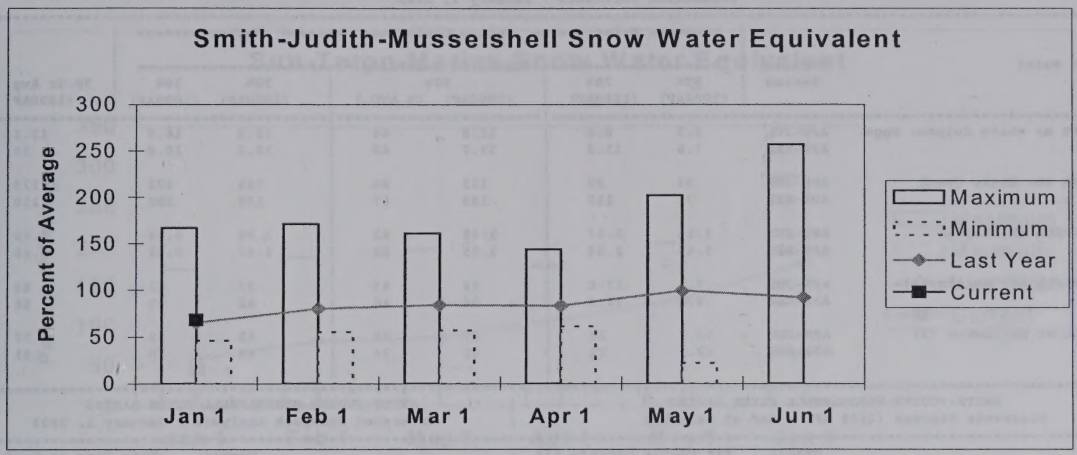
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HEADWATERS MAINSTEM	8	90	64
SMITH-JUDITH-MUSSELSHELL	10	110	68
SUN-TETON-MARIAS	7	78	46
MAINSTEM ab FT PECK RES	24	94	57
MILK RIVER BASIN	4	140	9
MISSOURI MAINSTEM BASIN	27	96	55

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

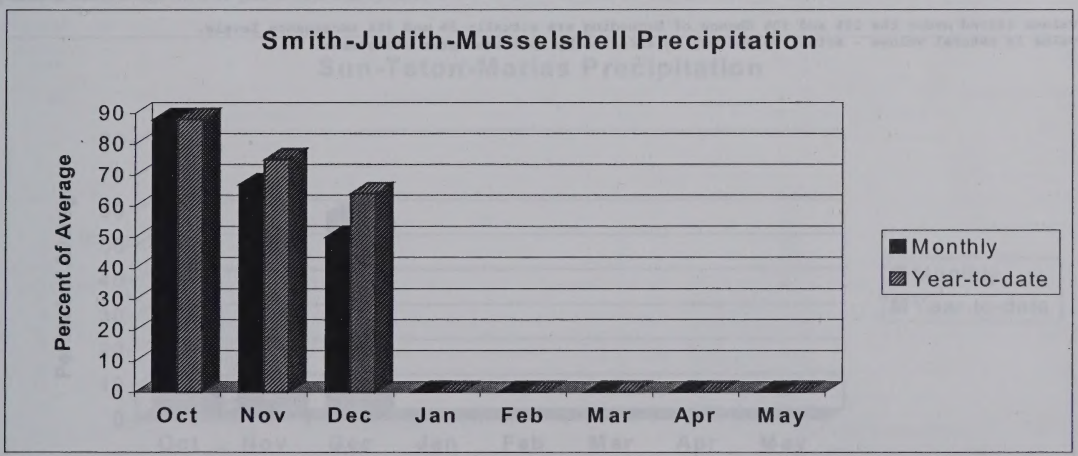
Smith-Judith-Musselshell River Basins

Snowpack conditions in the Smith-Judith-Musselshell River Basins were well below average and fourth lowest of record. Snow water content in the Smith River Basin was 72 percent of average and 109 percent of last year; in the Judith River Basin was 63 percent of average and 111 percent of last year; and in the Musselshell River Basin was 50 percent of average and 81 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1988; February maximum swe was in 1978 and minimum swe was in 1987; March maximum swe was in 1978 and minimum swe was in 1987; April maximum swe was in 1970 and minimum swe was in 1992; and May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1967 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December in the Smith-Belts was 53 percent of average and 91 percent of last year; in the Judith was 47 percent of average and 182 percent of last year; and in the Musselshell was 48 percent of average and 218 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 64 percent of average and 102 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 42 to 54 percent.

Smith River storage was 70 percent of average and 333 percent of last year; Bair storage was 40 percent of average and 108 percent of last year; Martinsdale storage was 9 percent of average and 450 percent of last year; and Deadman's Basin was 30 percent of average and 117 percent of last year.

Surface Water Supply Index (SWSI) was -2.1 in the Smith River and -2.8 in the Musselshell River.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SHEEP CREEK nr White Sulphur Spgs.	APR-JUL	5.5	8.8	11.0	64	13.2	16.5	17.1
	APR-SEP	7.6	11.2	13.7	69	16.2	19.8	20
SMITH RIVER abv Eagle Creek	APR-JUL	58	92	115	66	138	172	175
	APR-SEP	71	112	140	67	168	209	210
NF MUSSELSHELL nr Delpine	APR-JUL	1.18	2.17	2.85	62	3.98	5.64	4.60
	APR-SEP	1.45	2.58	3.35	62	4.63	6.52	5.40
SF MUSSELSHELL abv Martinsdale	APR-JUL	7.3	17.0	24	45	39	61	52
	APR-SEP	8.1	18.6	26	46	42	65	56
MUSSELSHELL at Harlowton (2)	APR-JUL	12.3	21	27	34	43	68	77
	APR-SEP	12.7	21	27	33	45	70	81

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SMITH RIVER	10.6	4.0	1.2	5.7
BAIR	7.0	1.4	1.3	3.5
MARTINSDALE	23.1	0.9	0.2	10.1
DEADMAN'S BASIN	72.2	13.3	11.4	44.0

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Watershed Snowpack Analysis - January 1, 2003

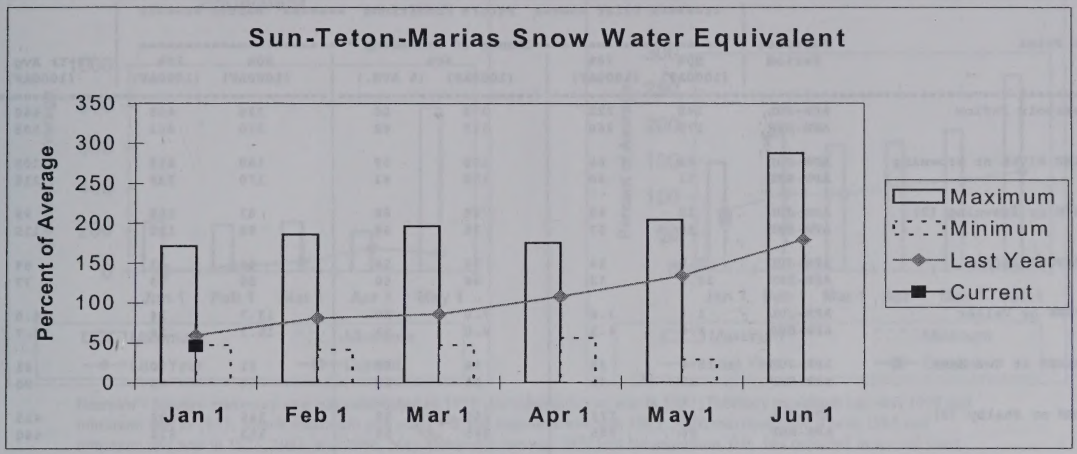
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SMITH	6	109	72
JUDITH	4	111	63
MUSSELSHELL	3	81	50
SMITH-JUDITH-MUSSELSHELL	10	110	68

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

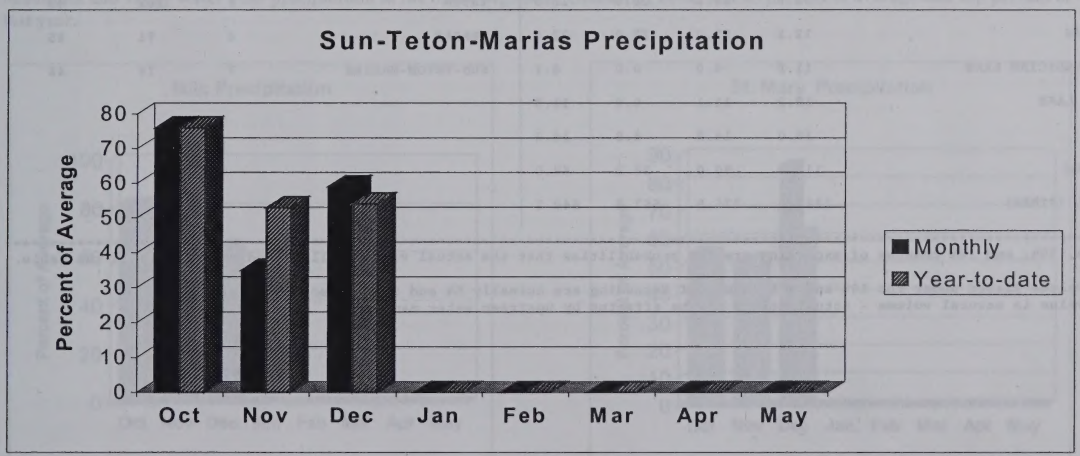
Sun-Teton-Marias River Basins

The combined snowpack conditions for the Sun-Teton-Marias River Basins were severely below average and set a new record low previously set in 1988. Snow water content was 46 percent of average and 78 percent of last year. Snow water content in the Sun River Basin was 50 percent of average and 86 percent of last year; in the Teton River Basin was 46 percent of average and 102 percent of last year; and in the Marias River Basin was 45 percent of average and 71 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1984; April maximum swe was in 1972 and minimum swe was in 1984; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum was in 1972 and minimum swe was in 1987, 1992, and 1998. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December in the Sun was 54 percent of average and 120 percent of last year; in the Teton was 64 percent of average and 114 percent of last year; and in the Marias was 58 percent of average and 94 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 54 percent of average and 89 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 39 to 59 percent.

Gibson storage was 93 percent of average and 181 percent of last year; Pishkun storage was 108 percent of average and 98 percent of last year; Willow Creek storage was 123 percent of average and 194 percent of last year; Lower Two Medicine Lake storage was 46 percent of average and 0 percent of last year; Four Horns Lake storage was 94 percent of average and 0 percent of last year; Swift storage was 104 percent of average and 329 percent of last year; Lake Frances storage was 134 percent of average and 372 percent of last year; and Lake Elwell (Tiber) storage was 120 percent of average and 116 percent of last year.

Surface Water Supply Index (SWSI) was -3.4 in the Sun River; -2.6 in the Teton River; -2.0 in the Birch/Dupuyer Creeks; -2.2 in the Marias River above Tiber, and -0.3 in the Marias below Tiber.

SUN-TETON-MARIAS RIVER BASINS
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GIBSON Reservoir Inflow	APR-JUL	145	222	275	60	328	405	460
	APR-SEP	179	260	315	62	370	451	505
TWO MEDICINE RIVER nr Browning	APR-JUL	22	80	120	59	160	218	205
	APR-SEP	31	90	130	61	170	229	215
BADGER CREEK nr Browning (2)	APR-JUL	22	48	65	66	83	108	99
	APR-SEP	30	57	76	66	95	122	115
SWIFT RESERVOIR Inflow	APR-JUL	5.0	24	36	56	49	67	64
	APR-SEP	13.4	33	46	60	59	79	77
DUPUYER CREEK nr Valier	APR-JUL	1.4	3.6	7.0	50	13.7	24	14.0
	APR-SEP	1.6	4.3	8.0	51	15.2	26	15.7
CUT BANK CREEK at Cut Bank	APR-JUL	15.6	35	48	59	61	80	81
	APR-SEP	20	40	54	60	68	88	90
MARIAS RIVER nr Shelby (2)	APR-JUL	88	179	240	58	346	502	415
	APR-SEP	95	185	245	56	353	512	440
TETON nr Dutton	APR-JUL	5.3	13.4	19.0	37	34	56	51
	APR-SEP	7.7	15.6	21	36	36	58	59

SUN-TETON-MARIAS RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GIBSON	99.1	39.5	21.8	42.5
PISHKUN	32.0	19.5	20.0	18.0
WILLOW CREEK	32.2	27.0	13.9	22.0
LOWER TWO MEDICINE LAKE	11.9	4.0	0.0	8.7
FOUR HORNS LAKE	19.2	11.1	0.0	11.8
SWIFT	30.0	14.8	4.5	14.2
LAKE FRANCES	112.0	90.0	24.2	67.0
LAKE ELWELL (TIBER)	1347.0	776.8	667.8	648.1

SUN-TETON-MARIAS RIVER BASINS
Watershed Snowpack Analysis - January 1, 2003

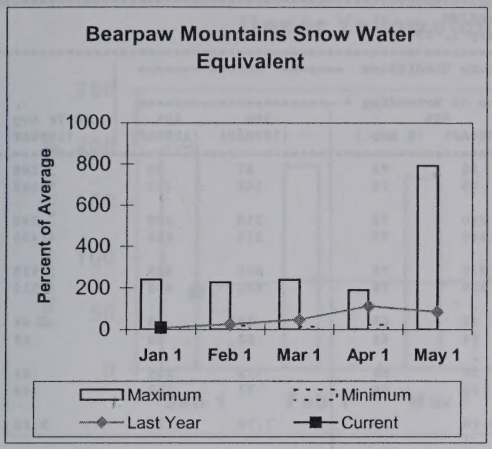
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SUN	2	86	50
TETON	3	102	46
MARIAS	4	71	45
SUN-TETON-MARIAS	7	78	46

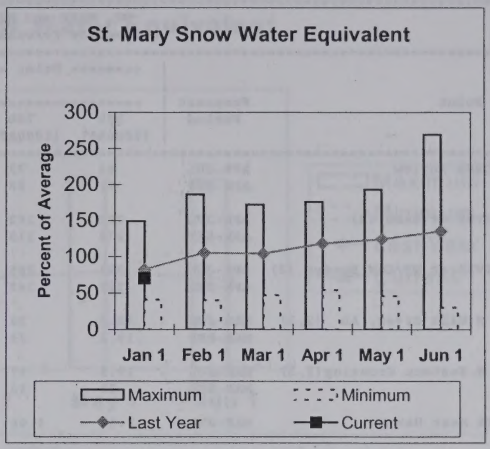
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

St. Mary and Milk River Basins

Snowpack conditions in the St. Mary and Milk River Basins were well below average. Snow water content in the Saint Mary River Basin was 78 percent of average 87 percent of last year. The Milk River Basin (Bearpaw Mountains) was 9 percent of average and 140 percent of last year and second lowest of record behind last year.

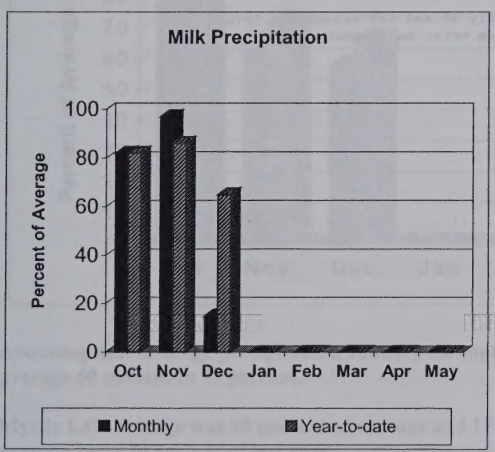


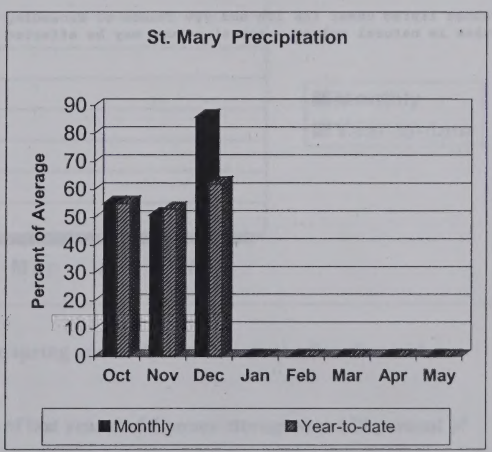


Bearpaw - January maximum swe was established in 1978 and minimum swe was in 1981; February maximum swe was 1978 and minimum was in 1973; March maximum swe was 1978 and minimum swe was 1995; April maximum swe was in 1985 and minimum swe was in 1973, 1983, and 1986; May maximum swe was 1975 and the minimum, 0.0, has occurred in several years. Average is for the period 1971 through 2000.

St. Mary - January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1967 and 1972 and minimum swe was in 2001; May maximum swe was in 19972 and minimum swe was in 1977; and June maximum swe was in 1972 and minimum swe was 1992. Average is for the period 1971 through 2000.

Mountain and valley precipitation in the St. Mary River Basin during December was 86 percent of average and 98 percent of last year; and in the Milk River Basin during December was 15 percent of average and 116 percent of last year. Mountain and valley water year precipitation in the St. Mary, beginning October 1, 2002, was 62 percent of average and 73 percent of last year. Mountain and valley water year precipitation in the Milk, beginning October 1, 2002, was 65 percent of average and 159 percent of last year.





Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts in the St. Mary average 68 to 75 percent. In the Milk the spring and early summer streamflow forecasts average 46 to 60 percent.

Lake Sherburne storage was 39 percent of average and 70 percent of last year; Fresno storage was 98 percent of average and 547 percent of last year; Beaver Creek storage was 129 percent of average and 450 percent of last year; and Nelson storage was 122 percent of average and 332 percent of last year.

Surface Water Supply Index (SWSI) was -1.8 for the Milk River.

ST. MARY and MILK RIVER BASINS
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LAKE SHERBURNE Inflow	APR-JUL	62	73	80	76	87	98	105
	APR-SEP	77	88	95	78	102	113	122
ST. MARY RIVER nr Babb (2)	APR-JUL	222	262	290	75	318	358	385
	APR-SEP	272	315	345	77	375	418	450
ST. MARY RIVER at US/CAN Border (2)	APR-JUL	227	285	325	75	365	423	435
	APR-SEP	287	348	390	76	432	493	515
MILK RIVER @ Milk River, AB (2,3)	MAR-JUL	18.0	32	42	65	59	85	64
	MAR-SEP	19.2	34	44	64	63	90	69
MILK RIVER @ Eastern Crossing(2,3)	MAR-JUL	19.5	37	50	59	72	105	83
	MAR-SEP	21	40	53	60	77	112	88
BEAVER CREEK near Havre	MAR-JUL	2.10	4.06	5.40	56	7.79	11.29	9.60

ST. MARY and MILK RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE SHERBURNE	64.3	8.4	11.9	21.1
FRESNO	127.0	50.9	9.3	51.8
BEAVER CREEK	3.5	2.7	0.6	2.1
NELSON	66.8	43.5	13.1	35.7

ST. MARY and MILK RIVER BASINS
Watershed Snowpack Analysis - January 1, 2003

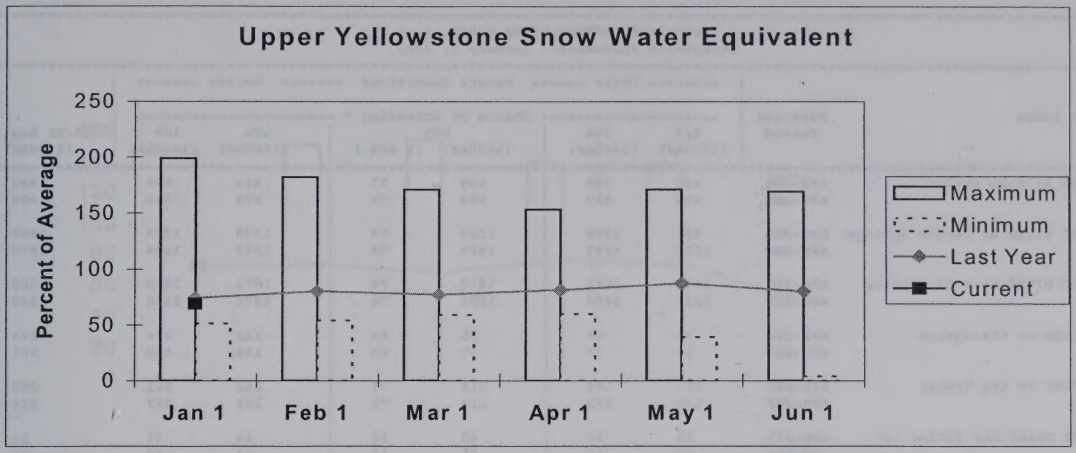
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
ST. MARY	2	86	70
BEARPAW MOUNTAINS	4	140	9
CYPRESS HILLS, CANADA	0	0	0
MILK RIVER BASIN	4	140	9
ST. MARY & MILK BASINS	6	87	57

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

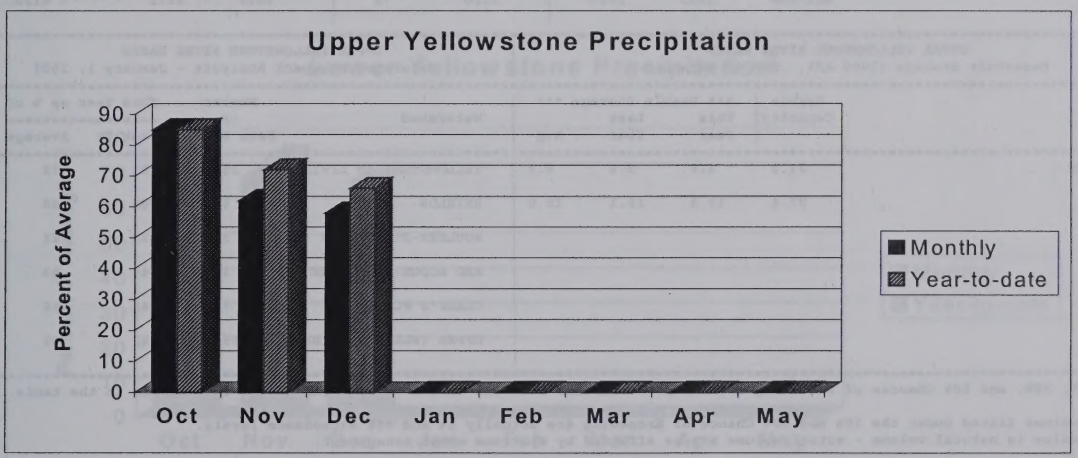
Upper Yellowstone River Basin

Snowpack conditions in the Upper Yellowstone River Basin were well below average and third lowest of record since 1981. Snow water content was 69 percent of average and 92 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1997 and minimum swe was in 2001; April maximum swe was in 1997 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1987; and June maximum swe was 1996 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 60 percent of average and 79 percent of last year. Valley precipitation during December was 44 percent of average and 105 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 66 percent of average and 85 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 60 percent to 72 percent.

Mystic Lake storage was 95 percent of average and 152 percent of last year and Cooney storage was 129 percent of average and 120 percent of last year.

Surface Water Supply Index (SWSI) was -2.5 in the Yellowstone River above Livingston; -2.3 in the Shields River; -3.0 in the Boulder River; -3.0 in the Stillwater River; -1.8 in the Rock/Red lodge Creeks; -2.8 in the Clarks Fork River; and -2.7 in the Yellowstone River above Bighorn River.

UPPER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
YELLOWSTONE at Lake Outlet	APR-JUL	316	399	455	77	511	594	590
	APR-SEP	420	527	600	75	673	780	805
YELLOWSTONE RIVER at Corwin Springs	APR-JUL	853	1075	1225	74	1375	1597	1650
	APR-SEP	1026	1287	1465	74	1643	1904	1970
YELLOWSTONE RIVER near Livingston	APR-JUL	1010	1248	1410	74	1572	1810	1900
	APR-SEP	1216	1498	1690	74	1882	2164	2280
SHIELDS RIVER nr Livingston	APR-JUL	33	64	85	59	122	176	145
	APR-SEP	38	73	97	60	138	198	162
BOULDER RIVER at Big Timber	APR-JUL	135	184	218	77	252	301	285
	APR-SEP	139	192	228	72	264	317	315
MYSTIC LAKE Reservoir Inflow (2)	APR-JUL	29	36	40	68	44	51	59
	APR-SEP	40	47	52	68	57	65	76
STILLWATER RIVER nr Absarokee (2)	APR-JUL	229	295	340	69	385	451	495
	APR-SEP	277	350	400	68	450	523	585
CLARKS FORK RIVER nr Belfry	APR-JUL	283	347	390	72	433	497	540
	APR-SEP	306	374	420	71	466	534	595
COONEY RESERVOIR Inflow (2)	APR-JUL	5.1	22	33	70	44	61	47
	APR-SEP	11.1	28	40	70	52	69	57
YELLOWSTONE RIVER at Billings (2)	APR-JUL	1713	2256	2625	75	2994	3537	3510
	APR-SEP	2189	2791	3200	78	3609	4211	4120

UPPER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MYSTIC LAKE	21.0	8.8	5.8	9.3
COONEY	27.4	19.3	16.1	15.0

UPPER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

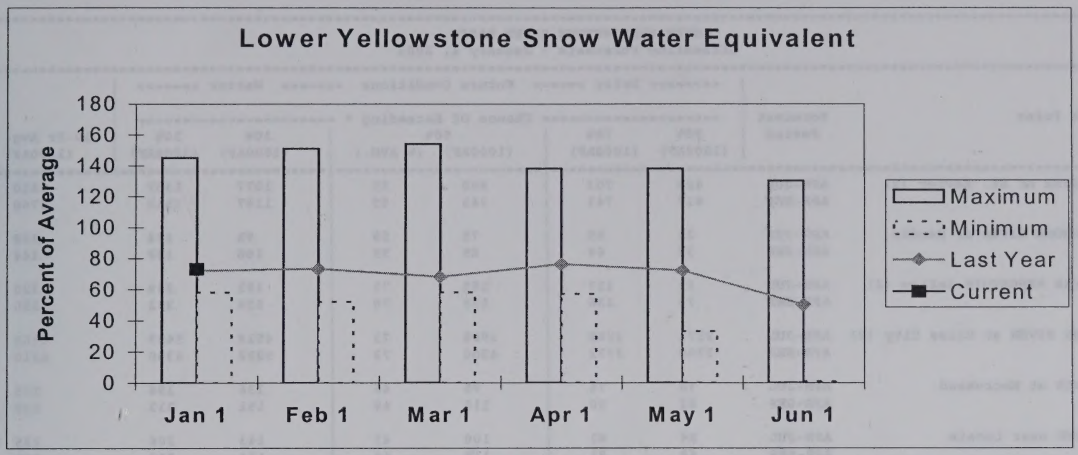
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
YELLOWSTONE ab LIVINGSTON	14	91	73
SHIELDS	4	85	58
BOULDER-STILLWATER	3	78	61
RED LODGE-ROCK CREEK	1	244	83
CLARK'S FORK	7	88	68
UPPER YELLOWSTONE BASIN	25	92	69

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

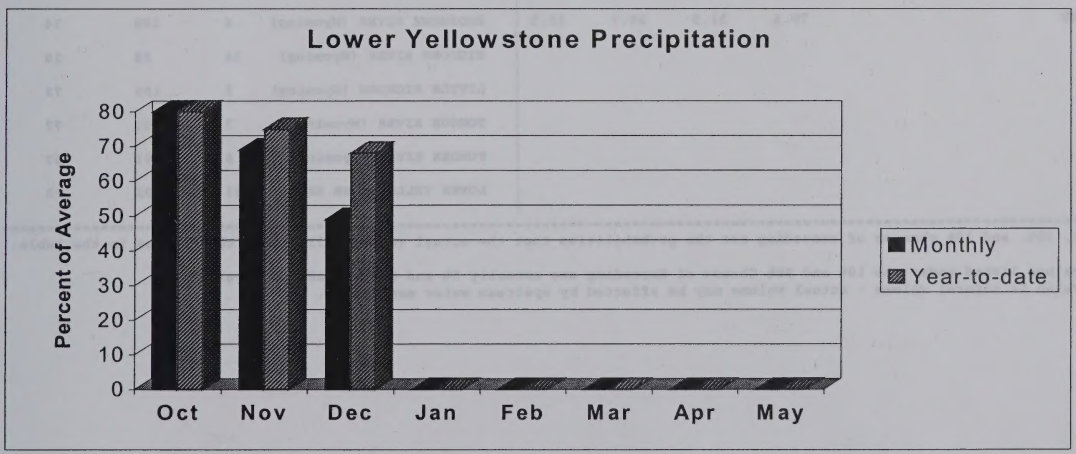
Lower Yellowstone River Basin

Snowpack conditions in the Lower Yellowstone River Basin (Wyoming), were below average and third lowest of record behind 2000 and 2002. Snow water content was 73 percent of average and 102 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 2000; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1986 and minimum swe was in 2001; April maximum swe was in 1986 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1981; and June maximum swe was in 1995 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain precipitation (Wyoming) during December was 48 percent of average and 71 percent of last year. Valley precipitation (Montana and Wyoming) during December was 49 percent of average and 79 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2002, was 68 percent of average and 95 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 47 to 60 percent.

Bighorn Lake storage was 70 percent of average and 84 percent of last year and Tongue River storage was 140 percent of average and 152 percent of last year.

Surface Water Supply Index (SWSI) was -3.7 in the Bighorn River below Bighorn Lake; -2.3 in the Little Bighorn River; -3.2 in the Yellowstone River below Bighorn River; -2.9 in the Tongue River; and -2.9 in the Powder River.

LOWER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - January 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIGHORN RIVER nr St. Xavier (2)	APR-JUL	428	703	890	55	1077	1352	1610
	APR-SEP	417	743	965	55	1187	1513	1760
LITTLE BIGHORN RIVER nr Hardin	APR-JUL	26	55	75	59	95	124	128
	APR-SEP	32	64	85	59	106	138	144
TONGUE RIVER RESERVOIR Inflow (2)	APR-JUL	62	117	155	71	193	248	220
	APR-SEP	78	136	175	70	214	272	250
YELLOWSTONE RIVER at Miles City (2)	APR-JUL	2371	3282	3900	73	4518	5429	5360
	APR-SEP	2700	3772	4500	73	5228	6300	6210
POWDER RIVER at Moorehead	APR-JUL	48	76	95	46	136	196	205
	APR-SEP	61	90	110	48	151	213	230
POWDER RIVER near Locate	APR-JUL	54	82	100	43	143	206	235
	APR-SEP	62	93	115	44	164	237	260
YELLOWSTONE RIVER nr Sidney (2)	APR-JUL	1950	2992	3700	68	4408	5450	5480
	APR-SEP	2310	3555	4400	70	5245	6490	6280

LOWER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

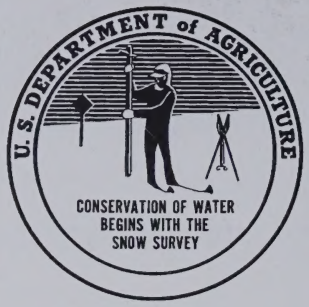
Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIGHORN LAKE	1356.0	635.6	753.1	911.1
TONGUE RIVER	79.1	31.5	20.7	22.5

LOWER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER (Wyoming)	12	101	72
SHOSHONE RIVER (Wyoming)	6	105	74
BIGHORN RIVER (Wyoming)	16	98	70
LITTLE BIGHORN (Wyoming)	2	105	72
TONGUE RIVER (Wyoming)	7	101	77
POWDER RIVER (Wyoming)	6	91	67
LOWER YELLOWSTONE BASIN (	31	102	73

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.



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Montana
Water Supply Outlook
Report

Natural Resources Conservation Service
Bozeman, MT